PHILADELPHIA, DECEMBER 17, 1881.

ORIGINAL LECTURES.

CLINICAL LECTURE ON URETHRAL CARUNCLE.

Delivered at the Hospital of the University of Pennsylvania, June 8, 1881,

BY WILLIAM GOODELL, M.D.,

Professor of Clinical Gynæcology.

Reported by GUY HINSDALE, M.D.

GENTLEMEN,—This patient, a woman 40 years of age, complains of great pain when passing her water. For several months her urine has scalded her; but the pain is constantly growing worse, and is now almost unbearable. It is most intense as the last few drops come away. Inasmuch as most of the lesions of the reproductive apparatus—such as vaginitis, uterine displacements, etc.—give rise to vesical disturbance, and since the symptoms are not always typical, a urethral caruncle is very likely to be overlooked by the physician. Reflex symptoms, uterine in their expression, lead him astray, while a very natural delicacy prevents him from making the needful visual inspection of the parts. Indeed, you cannot say in these cases, "I will look at the parts and see what is the matter." Woman's modest nature—we would not have it otherwise—instinctively resents such an examination, and, if brusquely proposed, it will almost always be denied. What, then, can you do? You can do it without consulting her. You can ask for a vaginal examination,—to which most women will submit,—and while you are exploring the uterus with the index finger you may with the thumb press upon the meatus, and notice whether the contact elicits pain; then, as you introduce or as you remove the speculum, with your eye glance at the urethra. It has always been my experience that whenever you can confidently say to your patient, "I have discovered the cause of your trouble; here it is,"—and then by pressing upon the caruncle convince her that your statement is correct,—she will not refuse any future needful exposure of her person. I make it an inflexible rule, when a woman complains of pain in passing her water, to feel for a caruncle. You must not forget in all these cases to go through with the formality of covering the patient with a sheet; for just as you gild and sugar-coat what is bitter to the taste, so you must gild and sugar-coat what is bitter to the mind.

As I separate her thighs and expose the meatus urinarius, those of you who are near can see at the upper margin of the meatus a small crimson and wart-like body. It is a vascular excrescence of the urethra, and looks like a small Antwerp raspberry. Notice its vascularity: it bleeds on the slightest touch. Observe how sensitive it is: although profoundly etherized, the woman winces and draws up her limbs. So exquisitely alert are the little nervelets distributed over its surface that were she not under the influence of ether she would writhe with pain under even the gentlest touch. The vulva and outlying organs of a woman are, as you have often observed in this amphitheatre, the last to yield to the influence of the anæsthetic. Sensation here is so acute that it will remain long after other peripheral nerves have become benumbed.

This little growth seems insignificant, but it has given this woman an immense amount of suffering. Not only does she have pain during micturition, but even in walking she is compelled to straddle her legs to avoid irritation. Some of the more aggravated cases that have come to my notice have presented a train of symptoms that could hardly be supposed to be directly caused by such a little growth. There may be constant heat and throbbing of the external organs of generation, with more or less of leucorrhœa, and the linen may be often stained with blood and the urine streaked with it. Cohabitation becomes painful, producing the condition known as dyspareunia. It is at the first entrance of the male organ that there is the most pain. This is so intolerable that many women will not permit their husbands to approach them. This is, of course, a source of domestic unhappiness. By brooding over their sufferings and their incomplete conjugal relations the mind becomes morbid, and in some cases women have been driven to insanity or even suicide.

These torturing growths are more common to the married than to the single, and occur usually in women who have passed the prime of life. I am inclined to think that they owe their existence to

the congestion of the urethral plexus of veins, such, for instance, as is induced by the pressure of the gravid or displaced womb, or by that of an over-distended bladder or of a loaded rectum. In fact, pretty much the same causes are at work which tend to produce piles. They consist of hypertrophied papillæ covered with a layer of tessellated epithelium, and are largely supplied with nerves and blood-vessels.

Now comes the final question. What can we do to effect a cure? When there is a distinct pedicle, one snip of the scissors is all that is needed; but when, as in this case, they are attached by a broad base, difficulties arise which demand ether and assistance. The patient lies back, her knees being supported by these gentlemen, who also place their fingers on each side of the meatus and stretch it open. Catching the caruncle with a tenaculum, I raise it up and dissect it out, taking with it some of the sound flesh. The wound bleeds freely. In order to check the hemorrhage and to insure the complete destruction of the growth, we shall now cauterize it. I shall cauterize it as you would have to do in the country, and I shall not, therefore, employ on this occasion the Paquelin thermo-cautery, which, although it is by far the best and most convenient instrument for the purpose, is so expensive that few of you will be able to command it. You can therefore use the iron handle of a broken file heated to redness, as you now see me heat it, taking care, however, that your eyes are not exposed to any bright flame as the instrument is being heated, for the light may dazzle you, and a large black spot will follow and obscure your vision, no matter where you look. The pale flame of an alcohol lamp is therefore the best for the purpose.

Nitric acid is not so efficient a caustic as the hot iron. Formerly I always employed it, searing the raw surface of the wound with the frayed end of a match dipped into the fuming acid. It does not, however, always stay the hemorrhage, which is sometimes quite free. I shall never forget a scrape I got into some time ago while doing an operation of this kind. The patient was a very nice lady, but she was exceedingly reluctant to my having any other gentlemen present at the operation. Her sisters stoutly protested their ability to give the assistance that I said was needed, and begged me to rely upon them instead of calling in any outside aid. This I finally consented to do. Everything progressed nicely until I began to dissect out the growth, when, suddenly noticing one of the patient's legs beginning to grow unsteady, I looked up and caught sight of one of the sisters going off in a fainting-fit. I instantly turned upon her and shouted, "Stop that! If you faint, I'll stick a pin into you!" This brought her to her senses and sent a flush of blood to her cheeks. By making a vigorous use of threats and by constantly talking to her I managed to keep her on her feet. Towards the end, however, she could not stand it any longer, and while I was applying the nitric acid she suddenly fell to the floor. In the confusion and excitement of the moment I unluckily upset the bottle of nitric acid over the handsome Brussels carpet. But this was not all. At my second visit, twelve hours afterwards, I found that the lady had lost and was still losing too much blood. I stanched the bleeding point with ice and Monsel's salt, and put on a compress with a T bandage; but at my next visit, six hours later, I found her quite blanched from a recurrence of the hemorrhage. I now applied the solid stick of silver nitrate, but without avail; then I tried to nip the bleeding point with a *serre-fine*, but the tenderness of the part was so great that she would not permit any further interference, nor would she again inhale an anæsthetic. For a moment I was at my wits' end to know what to do. The prospect of spending the day at her bedside with my finger pressing on the urethra through the vagina was not an agreeable one; but I finally succeeded by stuffing a sponge half-way into the vulvar opening. Its elasticity and that of the perineum, on which it rested, made the needful pressure on the bleeding surface.

The after-treatment will consist of the application, twice a week, of the undiluted commercial carbolic acid until the raw surface has skinned over. If you follow the plan of treatment that I have laid down you will rarely have to repeat the operation. Although I have often burnt these caruncles, there has never followed any contraction of the urethra: mucous membrane does not undergo the cicatricial contraction that skin does.

Gentlemen, once in a while, in treating a woman for another disease, you will

come across a caruncle, and you may be tempted to remove it; but let well enough alone, and do not touch it, unless you know it to be of the painful kind. The suffering caused by them bears no relation whatever to their size, and, unless the symptoms are aggravated, it is best not to touch them.

ORIGINAL COMMUNICATIONS.

THE PRE-PHYSICAL SIGN STAGE OF PHTHISIS PULMONALIS.

Read before the Philadelphia County Medical Society, October 26, 1881,

BY J. T. ESKRIDGE, M.D.,

Lecturer on General and Physical Diagnosis in the Philadelphia School of Anatomy, and Physician to the Howard and St. Mary's Hospitals and Catharine Street Dispensary.

IN few diseases do the early symptoms differ more widely than those presented by different cases of pulmonary consumption. In some individuals the affection steals its march into the system so insidiously that its presence is not suspected by friends, casual observers, and often even by the physician, until unfortunate and serious inroads have been made upon the vital forces. In most cases, however, when the patient seeks medical advice, an examination reveals the fact that the disease has been in operation for some time. Some with incipient phthisis, from feelings of lassitude, general indisposition, and loss of appetite, have sought advice, in whose lungs no positive evidence of the disease could be detected.

Certain premonitory symptoms may, and often do, manifest themselves more or less in persons who soon become tuberculous.

The symptoms of consumption may be divided into two groups or stages,—the prodromic, those that precede the outbreak of the malady, as manifested by the development of physical signs by which a diagnosis is made or corroborated; and those present from the first manifestation of physical signs to the termination of the disease. To the former group some have been pleased to give the name pretubercular symptoms. If we adopt the view that tuberculosis is a special disease, requiring for its development, besides favorable circumstances, a taint of the system or means by which its communicability is possible, it will be perceived that the first symptoms of tuberculosis are due to tubercle, and that a group of symptoms of the disease preceding the affection of the system by the disease is born of the merest fancy. On the other hand, if we accept the view expressed by Dr. Hughes Bennett, that tuberculosis is not a special disease, but that it is a retrograde process which may take place in the vascular tissues of any person whose general health is far below the norm, a pretubercular stage would mean nothing more than a lowering of the vital functions, adopting which the convalescing period of most diseases constitutes the pretubercular stage.

PRODROMIC SYMPTOMS.

Many cases of tuberculosis have apparently no appreciable symptoms preceding the physical signs. When the disease is ushered in by a severe cold following exposure to inclement weather, it usually manifests itself by bronchitis, with spots of pulmonary consolidation, or rapid infiltration of the parenchymatous tissue of the lung and localized bronchitis. Either of these conditions may take place in persons predisposed to the disease when subjected to undue hardship or exposure, whose general health before the attack would probably not have given the slightest suspicion of disease. In such it is a pulmonary or broncho-pulmonary inflammation, the structures involved take on a low grade of tissue-change, and the disease does not tend to end in resolution. In some persons a lobar pneumonia of the upper or lower part of the lung is followed by tuberculosis, and the infiltrated organ is rapidly studded with tubercle.

A careful study of many cases of phthisis has convinced me that not every one who dates the beginning of his illness from a "cold" was well previously to such an attack.

There is a form of consumption whose symptoms are so obscure, especially when occurring in a person of a delicate constitution, that the greater part of one lung may be consolidated and the individual almost ready to succumb to the ravages of the disease before the morbid process is detected. Dr. Hughes Bennett* mentions one such in the daughter of a physician, whose trouble was not detected until a

* Reynolds's System of Medicine, American edition.

large amount of the lungs were involved, and only two weeks before her death.

Excluding all such cases, there will remain quite a number with obscure and ill-defined symptoms of failing health before lung-involvement can be detected by experts in the best methods of physical diagnosis.

The importance which different individuals will give to their ailments, which may be only remotely connected with the lungs, depends largely upon the apprehensive state of the patient's mind. If some near relative has recently died of consumption, and the person has a vivid imagination, every ache, every pain, every cough, every sore throat, every sick stomach, every tired feeling, and every symptom (imagined or real) of the least deviation from what such a one may consider the normal standard of health is seized upon and magnified as the sure precursor of pulmonary phthisis.

Many or all of the symptoms that may precede fully-developed consumption may be caused by various other chronic maladies, prominent among which are chronic malaria and suppuration and disorder of the generative organs, especially in the female. When, therefore, any of these disorders are present in a person predisposed to tuberculosis, whose general health excites suspicion of phthisis, it is impossible, without great care, patience, and skill, to make even a probable diagnosis before the physical signs in the lungs are sufficiently developed to be detected. I would not ignore or undervalue the symptoms which often precede certain forms of consumption; but in studying them, so great is the chance of being misled, that every one must be well weighed and the corroborative circumstances taken into account before an opinion is expressed. I feel sure that the importance of the early symptomatology of pulmonary consumption could be greatly improved by records of carefully-studied cases running over years in some instances before any decided impression is made upon the lungs by the disease.

If consumption can be arrested, it is evidently much more easily effected before than after appreciable lung-involvement.

The prodromic symptoms may be divided into subjective and objective. The subjective are quite numerous; the objective, few,—viz., pulse, respiration, and temperature.

SUBJECTIVE PRODROMIC SYMPTOMS.

Appetite.—This may be capricious, certain articles being taken with a relish, or it may be almost entirely lost: nothing in the way of food is enjoyed, the individual never getting hungry, and what is eaten is taken against the protest of the stomach. The latter condition is the exception rather than the rule, and is much more frequently met with in the anæmic condition of young girls suffering from menstrual disorders than as a symptom of the ill-defined stage preceding developed phthisis. In one case coming under my care the appetite was much increased for several weeks preceding a profuse pulmonary hemorrhage, which ushered in the first-recognized symptoms of what proved to be acute tuberculosis.

Indigestion.—I have found this to be one of the most constant derangements accompanying the development of the tubercular state; in fact, it is rarely absent in those cases that are followed by a high temperature and considerable constitutional disturbance, becoming more marked as the disease progresses. It may take on various forms: there may be a sense of weight at the stomach after eating, making the individual conscious of the digestive act; there may be acid or alkaline eructations, or—what I have most commonly met with a few minutes or an hour or more after eating—a portion of the meal is vomited without any sick feeling of any moment preceding or following the act. When this form of indigestion persists for some time in a person predisposed to tuberculosis, it makes me apprehensive, especially if there is a gradual

Loss of flesh.—This symptom, like the preceding one, is rarely absent; but so numerous are the causes that may produce it, and as a periodical decrease in the weight of the body is so often associated with perfect health, it is difficult to know what stress to lay upon it.

In general, when a person with a fair appetite, under favorable circumstances, is gradually losing flesh, in whom no other apparent cause can be found than a predisposition to tuberculosis, this disease should be feared; and the apprehension will be strengthened if other symptoms of consumption are present. I find in looking over my recorded cases that not a few had been gradually losing flesh from six months to several years before any decided lung-involvement could be detected. When,

however, other causes are present and operating in giving rise to loss of flesh, in whom phthisis of the lungs is being gradually developed, the difficulty of assigning to each individual symptom its true significance is greatly enhanced.

Pallidness.—It is only in the more slowly developed cases that this symptom is of any service in the diagnosis. It differs from the swarthy appearance in cardiac weakness and from the waxy look in renal disease. The conjunctivæ may become pearly and the individual present a peculiar tight-skinned, bleached appearance, as if the blood is being gradually impoverished and the subcutaneous fatty tissue absorbed; add to this the evening blush, the hacking cough, the accelerated pulse, and the heightened temperature, and you have an array of symptoms which will excite the suspicion of the merest tyro; yet the best expert, in a few cases, is unable to make a positive diagnosis from the physical signs present.

Muscular weakness, tired feelings, and indisposition to physical exercise are usually associated, and are due to the same cause,—lessened vital force. In a case of gradually-developed phthisis it is rare that these sensations are not complained of before a diagnosis can be made by the pulmonary signs. An individual thus affected, if he be an athlete, finds that it requires extra exertion to perform the usual amount of physical exercise, and soon he is unable to perform the feats of strength which formerly had not tasked him greatly. Such a person complains of tired feelings and says he is scarcely ever rested; he goes to bed tired and gets up the same; he complains of aching pains in his muscles; and on account of the muscular weakness and tired feelings he is indisposed to take much physical exercise. The indisposition in some cases is a marked feature, and becomes more prominent as the disease progresses. I have seen some cases of tuberculosis in persons who, before of industrious habits, would rather undergo the annoyance of thirst than to disturb their quiet by the necessary effort required to procure water. From observing this phenomenon in a limited number of cases of beginning phthisis, I have found the greater the indisposition to exercise, the more the chances are that the disease will rapidly develop and run a short course.

Irritability of temper has been given by some as one of the prodromic symptoms of the disease under consideration. It is a well-known fact that persons sick from any cause bear the annoyances of life less calmly than in health; but I have been unable to satisfy myself that it is more marked in persons suffering from incipient phthisis than in those afflicted with other diseases of a very depressing nature. This I have noticed,—that persons confined to their bed with consumption bear neglect on the part of their friends and attendants with less patience than persons alike prostrated from any other disease.

Anxiety and nervousness are often prominent symptoms during the prodromic stage of consumption. An individual thus afflicted becomes over-anxious about himself and lays unusual stress upon and magnifies vague symptoms. The doctor is consulted; and if he assures his patient that nothing positive can be detected, his mind is quieted for a time; but soon the doctor's advice is again sought,—this time for some symptom forgotten at the previous visit, or, perchance, one alluded to by the physician of which the patient had not previously complained; or yet, what is more common among people of wealth, one doctor after another is consulted until positive evidences of pulmonary disease have been developed. The anxiety exhibited by an individual over various symptoms thus early in the disease contrasts strongly with the stolid indifference often shown later, when, despite every symptom to the contrary, the unfortunate sufferer frequently persists in denying that he has consumption.

Irregular alvine discharges.—As a premonitory symptom of consumption, irregular action of the bowels is most usually found in gradually-formed cases, or what has been termed "chronic phthisis." This has been a prominent feature of this stage of the disease in several individuals coming under my care: in one man, who has since died, it was present two or three years before I could detect any decided affection of the lungs. In some persons the irregular action of the bowels consists in periods of diarrhœa alternated by constipation. During the attacks of diarrhœa the evacuations, although often frequent, are not usually large; the fæces consist of hard lumps covered with a frothy mucus; more or less pain or an uneasy feeling is experienced by the individual during defecation.

If the action of the bowels is left alone during the periods of constipation, an evacuation will not take place oftener than once in two or three days. The patient during this time is dyspeptic, and if he eat articles of diet difficult to digest he will suffer from eructations of gas and sour mucus. Feeling better during the occasional attacks of diarrhœa, he considers himself of a bilious temperament, and resorts to all kinds of purgatives supposed to have an action on the liver. If such a person will lead an active out-door life, his symptoms will materially improve; but if his business of a sedentary character be continued, he becomes a confirmed dyspeptic and hypochondriac.

Disordered menstruation.—The disorders of menstruation occurring during the incipient stage of phthisis are painful menstruation, diminished and absent menstrual flow. Diminished menstrual flow and painful menstruation are disorders of women of so frequent occurrence, both in the married and unmarried, that they can have but little weight as premonitory symptoms in the diagnosis of phthisis. Suppressed menstruation as a symptom of phthisis usually does not occur until the disease can be detected readily by a physical exploration of the chest; but if it take place early I know of no subjective symptom of more importance in the diagnosis.

Aversion to fatty articles of diet.—Formerly, writers on pulmonary phthisis laid great stress on this as an early symptom of great importance, although of late less significance has been attached to it. Speaking from experience, I do not think this symptom has much value, for the habit of rejecting all fat from the lean of meat is more frequently absent than present, and it is commonly found in persons of delicate health, irrespective of consumption. I find many persons with undoubted incipient phthisis who take, digest, and relish fatty articles of diet not usually borne by persons in good health. On the other hand, many in the enjoyment of vigorous constitutions who, so far as we know, never become phthisical, have a disgust for fatty food, and cannot digest small quantities of it without considerable inconvenience. If this symptom has any special value in the early diagnosis of phthisis, I think it will be found limited to those cases attended by a marked rise in the temperature and considerable constitutional depression.

Inability to perform the usual amount of labor.—In gradually-developed phthisis this is usually a prominent feature before the lungs are sufficiently involved to enable one to detect the disease by a physical exploration of the chest. The individual will complain on going up and down stairs, or on walking against the wind, of shortness of breath and palpitation of the heart. This symptom is not of much importance in the shorter cases whose marked constitutional disturbances come on suddenly.

Activity of mind.—Dr. Da Costa refers to the great vividness of the imagination as a symptom of consumption, but he does not speak of it as occurring especially early in the disease. In slowly-formed cases of this trouble I have frequently noticed the mind during the prodromic stage to be less vivid in its imaginations than in health, save to magnify special ailments; and, in fact, dulness of the intellect has been a prominent symptom in some individuals who were of a despondent turn of mind. Although in some of the more chronic cases the mind seems to be blunted early in the disease by over-anxiety for health, this is by no means the universal state of affairs, for some thus afflicted present as an early symptom unusual brightness of intellect.

As a precursor of acute phthisis, I have frequently observed periods of one or more months, immediately preceding the outbreak of the disease, during which the mind was very active. In some individuals this state of mind has been so marked as to attract the attention of the parents and friends; and just as high hopes were being entertained respecting such a one's future career, sudden pulmonary hemorrhage has ushered in the disease with an array of symptoms which soon put an end to all hope.

Chest-pains.—These are more commonly present after the lung has been involved to a considerable extent, and are then most certainly due to an inflammatory affection of the pleuræ. In no small proportion of cases they precede the physical signs of the disease by months or years, and, what seems strange, they are often complained of most on the side opposite to the one affected. It is probable that these early pains, like those experienced later in consumption, are due to local spots of pleuritis too small to be detected by the ear. They are described as starting in the front part

of the chest and extending to one or both shoulder-blades, and as often being dull in character, except on a full inspiration, when they become sharp; at other times they are spoken of as being a sense of tightness or uneasy feeling in the upper portion of both lungs. Individuals thus afflicted not infrequently complain of sharp, shooting pains in the muscles of the neck, shoulders, and chest, owing, it may be, to the neuralgic condition supervening upon the impoverished condition of the blood. However vague and shifting these pains are, they have a certain amount of significance when found in connection with other symptoms of incipient phthisis. I have several persons under my care at present who have complained of chest and other associated pains for about two and a half years, who now begin to present undoubted evidences of lung-involvement, as evidenced by a careful physical exploration of the chest. In these cases the pains referred to became gradually more frequent and localized, and other symptoms of the disease in its incipiency, becoming more marked each year, were present.

Hoarseness.—This is often found in persons who soon show undoubted signs of pulmonary consumption. The period during which it may precede the development of the physical signs varies from months to years. In that class of cases called by Dr. Hughes Bennett laryngeal phthisis, in which the laryngeal trouble seems to precede that of the lungs, hoarseness is very liable to be a prominent symptom throughout the disease, although some of these cases lose more or less of their laryngeal character as the lung-tissue becomes infiltrated.

In all cases of chronic hoarseness, or when the voice is affected by slight changes in the atmosphere, or when there is a chronic laryngeal cough or chronic laryngitis in a person predisposed to tuberculosis, or when a person presents other symptoms favoring the suspicion of tubercle, the larynx should be carefully examined by means of the laryngoscope; for it is well known that great damage to the vocal apparatus may be made by the ravages of this disease before any structural alteration can be detected in the lungs.

According to the statements of Drs. Cohen, Seiler, and other laryngoscopists, many cases of tuberculosis may be positively diagnosed by a careful examination of the larynx before the skilled auscultator is able to detect any disease in the lungs.

A point to which attention has been called by Dr. Hughes Bennett—and one which I have reason to believe has been often overlooked by the busy practitioner—is that "the laryngeal symptoms may completely mask the pulmonary lesion by giving rise to a hoarse, rough murmur on inspiration, which renders the physical signs at the apex of the lung inaudible; and, unless decided dulness be present, the disease is liable to go undetected."

Cough.—While hoarseness is an occasional symptom preceding the physical signs of consumption, cough is almost a constant one, and is often the first thing that attracts the attention of the patient and his friends, antedating, in many instances, the development of the physical signs by months or years.

Its character varies, being more frequently of a dry, irritative nature; yet it may have a loud barking or ringing quality, the latter depending probably upon the seat of the irritation, whether it be in the larynx, bronchial tubes, or pulmonary tissue. Irritation of the recurrent laryngeal nerves is the immediate cause of the cough. As a cough may arise from so many causes, it is difficult to know what importance to attach to it as a symptom of pulmonary phthisis when no disease of the lungs can be detected by the physical signs present. If no cause for a cough present in a given case can be found outside of the lungs, disease of these organs should be apprehended; and such an opinion would be strengthened if other symptoms of pulmonary trouble were present, although the physical signs still remained negative. I have not met with a single case of chronic consumption coming under my care before the development of recognized physical signs which did not have some cough as a symptom, although in some it has only been a short hack, or, as others express themselves, an occasional desire to clear the throat. Many who are so little troubled with cough deny, in a general way, the presence of this symptom; but if such persons are closely questioned in regard to it immediately after rising in the morning or after eating or taking unusually active exercise, they will rarely fail to acknowledge that they have a slight cough at these times.

According to some authorities, there are

a number of cases of consumption that have no cough as an early symptom, and in not a few the disease may be well advanced—even to breaking down of the consolidated lung-substance—before cough is noticed. All phthisical persons that have given me such a history, on close questioning, have admitted occasional cough previously to the time from which they dated their illness, although they had not supposed that this had anything to do with their lung-trouble.

Pulmonary hemorrhage.—According to some, whose opinions, on account of their great experience, must be respected, this is not an infrequent premonitory symptom of pulmonary phthisis. Most cases of hæmoptysis coming under my care, however, have either occurred in individuals whose lungs presented slight physical signs of disease, or the hemorrhages have been vicarious or otherwise disassociated from tuberculosis. The number in whom consumption has subsequently developed has been reduced to two or, at most, three. Sometimes the area of consolidation, when hemorrhage occurs, is quite small; but by a careful examination of the lungs, as soon as the arterial excitement has been allayed, impaired percussion resonance and harsh respiration have been detected under one clavicle, and, in rare cases, posteriorly above the spine of one scapula. A rarer form of pulmonary hemorrhage is one which is most frequently found occurring in children, and often follows whooping-cough. In this form no pulmonary dulness can be detected at the time of the hemorrhage, nothing but a localized apical bronchitis being present to give rise to the loss of blood. Dr. Hughes Bennett mentions similar cases, one of which was about six years in running its course before death; but at no time was there any dulness on percussion.

A child four years old, who was prostrated the early part of this year by a severe attack of whooping-cough, has been under my care recently at the Catharine Street Dispensary, suffering with repeated hæmoptysis, the physical signs being those of double apicial bronchitis and emphysema.

OBJECTIVE SYMPTOMS.

Under this division I shall include three symptoms which might be, and are by some, included under the physical signs; but, as they can all be investigated without any reference to the lungs, it suits my purpose best at present to class them as above stated. They are the respiration, pulse, and temperature, the first of which is of the least importance as a prodromic symptom of phthisis. In the chronic cases of this disease one lung will be sufficiently involved to give rise to physical signs before the respirations, when the individual is quiet, will show any material acceleration; and in this class it will often be found that after one lung has become almost solid, if the patient has been quiet some time before the examination, the number of respirations may not be increased more than one or two per minute. The only cases in which the respirations are notably quickened during the prodromic stage are those of an inflammatory nature and that run a short course; and even in these the period of sufficient excitement to materially modify the normal respirations is often so short that it passes entirely unnoticed.

The pulse, though often only increased in frequency in proportion to the respiration, is of far more importance than the latter as an early symptom of consumption, because other modifications of it from the norm are of more value than its frequency,—such as its volume, regularity, and steadiness.

The time was when the pulse received too much attention, to the exclusion of variations of equal or more important functions; but now, through the multiplicity of symptoms which modern science has arrayed as the indices of disease, the other extreme has been reached, in which the pulse is often only examined in a routine way, without any particular endeavor to ascertain the slight modifications that it has undergone. It is impossible to make a thorough examination of a patient suffering with any disease that disturbs the circulatory apparatus without a careful consideration of the different changes that the pulse of such a one presents.

In the gradually-developed cases of phthisis the only abnormal phenomena that the pulse shows previously to the development of physical signs are increased frequency and want of tone,—just what we find in all persons suffering from lowered vitality. Although in such cases no special importance can be attached to the character of the pulse, yet when these phenomena are associated with other symptoms of

phthisis their meaning should not be overlooked. In cases that are more decidedly inflammatory in their nature, and especially in those that run a comparatively short course, the pulse gives undoubted evidences of severe constitutional disturbance before the lungs (from the physical signs present) can be positively said to be the seat of the trouble. The pulse is quickened and at times increased in force, but it is nervous, vibratory, and compressible. It is rare that we have an opportunity to examine the pulse for a length of time during the prodromic stage of the more acute cases of tuberculosis, for the patient, previously to a hemorrhage, a high fever, or other evidences of great constitutional excitement, feels so well that a doctor is rarely consulted. I have not had the opportunity of studying the pulse of an individual for a few weeks previously to his having been attacked by acute miliary tuberculosis, but I have quite a number of interesting observations of the pulse, temperature, and respirations, extending over months, of persons subsequently attacked by pulmonary phthisis,—some being of the chronic, others of the subacute form; and each of these records shows a pulse varying from the norm in proportion to the severity of the disease subsequently more fully developed. At times during the prodromic stage of consumption the pulse will appear nearly normal, most other symptoms of a disordered condition of the system vanish, and the individual feels moderately comfortable (not well); but suddenly, after some slight change in the weather, the whole group of ailments previously complained of return. The changeableness of the symptoms depending upon the condition of the weather, although found in other maladies, appears, owing to its pointing to disease of the lungs, to have considerable diagnostic value.

Temperature.—Prof. Flint, in speaking of the temperature in pulmonary phthisis, says, "When it is a question as to diagnosis, increase of the temperature is evidence for, and absence of any increase is evidence against, the existence of the disease." Dr. Bennett* says, "According to Dr. Ringer, the heightened temperature of the body, as determined by the thermometer, indicates the deposition of tubercle for several weeks before physical signs are developed. It is true," continues Bennett, "that a similar increase of the temperature occurs in a few other diseases, but their symptoms are readily separable from those of phthisis. This new method," he continues, "of recognizing the disease at an early stage, requires more extended observation before it can be generally adopted."

I have been in the habit for the last few years of keeping the temperature records of all cases of consumption that have come under my care, both in private and charity practice, and, more than this, I have from time to time taken the temperature of all who presented suspicious symptoms of the disease. My observations in this direction now include several hundred cases; but, unfortunately, most of these were not seen by me until the physical signs of the disease made a diagnosis quite easy.

It would take up too much of the Society's time for me to read in detail the records and histories of all the cases in which a diagnosis of phthisis was almost positively made by means of the temperature, aided of course by other symptoms, before the development of the physical signs of the disease. Suffice it for me to give the results of my observations on the temperature as an early symptom of the deposit of tubercle in the following statements, subject to modification by more extended research in this direction:

1st. All cases of phthisis that I have seen early have been attended by a longer or shorter period of heightened temperature preceding the development of physical signs.

2d. The height of the temperature varies with the rapidity of the morbid action; and a sustained high temperature throughout the prodromic stage indicates that the disease will be of short duration, and *vice versâ*.

3d. As after physical signs are present there may be periods of lull when the thermometer will show a normal temperature, so during the pre-physical sign stage, after the temperature has been above the norm for several days, there may be for a variable time marked remissions in the body-heat or an entire absence of any febrile excitement.

4th. An axillary temperature sustained at 99° for several weeks in a person predisposed to phthisis should excite suspicion.

5th. In rare cases the morning temperature for several days may be higher than

* Reynolds's System of Medicine.

the evening; therefore thermometric records, to be satisfactory, should be made at various times of the day, including morning and evening, and they should extend over a period of one to several weeks.

In the pre-physical sign stage of phthisis there is no one symptom on which one can rely to the exclusion of all others; in fact, all the available symptoms only make a diagnosis approximate in the absence of all physical signs of the disease. The utility of paying so close attention to the early symptoms of consumption may not be apparent to all if a positive diagnosis cannot be made by them. Every one who has thoroughly studied this subject agrees that if anything can be done as a curative measure it must be done early, and that to wait in many cases for the presence of physical signs is to wait until just so much of the body as these represent is dead, and until the vital forces are so overwhelmed by the tubercular process that treatment can avail but little. When the lungs are examined and found not to present the physical signs of phthisis, the physician—although there may be an array of suspicious symptoms—too frequently assures his patient that he can find no evidence of pulmonary disease; and one with his mind thus relieved of grave apprehensions continues a course of living which too soon hurries on the physical signs of a disease which should have been previously apprehended and perhaps prevented. All individuals seeking advice whose general symptoms point towards consumption, although physical signs be absent, should be more carefully watched than those with fully developed phthisis; and if a given train of suspicious symptoms do not improve under the best hygienic and medicinal measures obtainable at home, a change of climate should be recommended for those who are able to avail themselves of it.

DOUBLE FEMORAL ARTERY.

BY J. P. CROZER GRIFFITH, M.D.,
Philadelphia.

FROM a surgical stand-point this is one of the most interesting and important of the arterial anomalies occurring in the lower extremity. I can find only five cases on record. In these the femoral divided into two branches at about one and one-half to two inches from Poupart's ligament, and below the origin of the profunda femoris. These branches ran parallel and close to each other, and reunited above the opening in the adductor magnus, thus forming a single popliteal artery.

The first case—Sir Charles Bell's*—was discovered after an operation by this surgeon upon a negro suffering from popliteal aneurism. After ligation of the supposed femoral, the pulsation ceased, but in a few seconds recommenced very distinctly. Nothing further in the way of operative procedure being deemed advisable, the wound was closed. In half an hour's time, pulsation in the tumor was nearly as distinct as before the operation. On the third day after, pulsation ceased. In a few days more the patient died, and the subsequent dissection showed that the femoral divided just below the origin of the profunda femoris into two nearly equal branches, which ran parallel and close to each other, and reunited at the point at which the artery passed through the adductor magnus.

In the second case—Houston's†—the division took place at one and three-quarter inches below Poupart's ligament. The branches, of which the internal was somewhat the larger, continued parallel, and reunited at precisely the point of passage through the adductor magnus. The anastomotica magna originated from the external branch just as it joined the internal.

The third case—Tyrrel's‡—occurred in a mature fœtus.

In the fourth case—Quain's—the femoral divided somewhat farther from the origin of the profunda femoris, and the branches reunited a short distance above the opening in the adductor magnus. This author states that he examined twelve hundred cadavers and found but this single case.§

The fifth case is Tiedemann's.‖ In this the reunion of the branches occurred at a considerable distance above the opening through the adductor magnus.

There is also a case reported by Ducachet,¶ but it cannot properly be included here. The femoral was tied previously to

* London Medical and Physical Journal, vol. lvi. p. 134, 1826.
† Dublin Hospital Reports, vol. iv. p. 134, 1827.
‡ Quain on the Arteries, p. 515, 1844.
§ Quain on the Arteries, p. 514, 1844, Plate lxxi. Fig. 2.
‖ Explanations to Collection of St. Bartholomew's Hospital, London, p. 108, 1846.
¶ American Medical Times, March 21, 1863.

amputation, and in making the section of the upper flap an artery the size of a quill was seen to bleed. At the autopsy it was found that the femoral divided below Poupart's ligament and above the origin of the profunda femoris, and that at the point of ligation the branches were separated about two inches. Nothing is stated as to reunion, and we cannot presume upon it.

Three cases are also mentioned by Gooch* in which he noticed in the stumps, after amputation, two femorals. But these also have to be excluded, for the same reason,—that we know nothing touching the reunion. I have heard it stated that another case has been recently reported; but I have been unable to find any account of it.

While dissecting in the anatomical rooms of the University of Pennsylvania in the spring of 1880, I was fortunate in finding another, the sixth, example of this anomaly. It was in the right leg of an adult white man. The division took place about four and a half inches below Poupart's ligament, and the branches, after running parallel and close to each other, reunited three-quarters of an inch above the opening through the adductor magnus. The length of the islet thus formed was three and one-half inches. The external branch was considerably smaller than the internal. The anastomotica magna left the femoral exactly opposite the point at which the union took place.

There was also an anomalous origin of the profunda femoris,—as it arose with the internal circumflex by a common trunk from the posterior aspect of the femoral.

This case differs from those previously described in that the division took place farther from Poupart's ligament, thus making the islet and the branches of shorter length. It appears most nearly to resemble the case of Quain.

REMARKABLE CASE OF GUNSHOT WOUND IN THE HEAD.

BY C. D. BOBO, M.D.

ON the morning of the 3d of August last, Mr. Thomas L. Byrne, of Nevada City, was shot in the head. The ball entered the forehead, three inches above the left eyebrow, three-fourths of an inch to the left of the median line, passing diagonally through the brain and lodging in the right cerebellum. Three hours after the shooting I was called to see the patient. Found the hemorrhage had been inconsiderable; blood was still flowing slightly, with occasional small particles of brain; pulse full and regular, 60 per minute; vomiting freely and often. As soon as the vomiting ceased, I passed a silver probe down to the ball; found distance to be six and a half or seven inches. I made no attempt to extract the ball.

The one-eighth of a grain of sul. morphia being administered at intervals of two hours, soon relieved the vomiting. The patient remained unconscious for some thirty-six hours, after which time he became conscious and recognized every one around him. At this time the pulse ran down to 48 and 50, and remained at that figure for four or five days. I then gave him one-grain doses of sul. quinia every three hours for forty-eight hours, at which time the pulse came up to 68 and 70, and remained steadily at that point for two and a half months. The dressing to the wound was a napkin wet with ice-water changed every ten or fifteen minutes. For one week his diet was gruel and soup. After that time I gave him a generous diet, which seemed to agree with him well. His bowels were kept in good condition by the aid of mild cathartic pills and enemas of castile soap and water. He gained flesh for some time, and I had some hope of his recovery; but at the beginning of the tenth week I found the pulse had gone down to 60 and much smaller. From this date he gradually grew weaker and more emaciated. A very little pus flowed from the wound all the time, quite healthy, and not more than one-half a fluidrachm per twenty-four hours. He did not complain much at any time. There was slight paralysis of the right arm and leg from the beginning. This increased as he began to sink. At the end of twelve weeks he died without moving a muscle in his face.

The autopsy revealed the following facts. The diagnosis as to the location of the ball was correct, and the ball was not the cause of the death of the patient directly, but indirectly. When the ball broke the skull it carried with it a portion of the bone half an inch long, one-third of an inch wide, and the thickness of the skull. This was driven down into the brain a distance of

* Philos. Transac., vol. lxv., Norwich.

two and a half inches. This piece of bone was the great trouble. Near it and a little to the left I found a very large abscess, certainly as large as a hen's egg. This abscess contained a thick greenish pus, quite fluid. The brain, posterior to it, was entirely broken down and soft, parts of it almost in a suppurating condition. The right hemisphere of the brain was very nearly in a normal condition. No suppuration whatever in the cerebellum where the ball was resting.

The above facts demonstrate most clearly to me that a man may be shot entirely through the brain and yet live, notwithstanding the ball is not removed.

NEVADA CITY, October 30, 1881.

NOTES OF HOSPITAL PRACTICE.

UNIVERSITY HOSPITAL.

CLINICAL SERVICE OF PROF. JOHN ASHHURST, JR., M.D.

Reported by WM. H. MORRISON, M.D.

ANEURISM OF THE FEMORAL ARTERY.

GENTLEMEN,—The first case that I propose to show you to-day is of interest; but we are not prepared to begin the treatment just now, as the man wishes to attend to some private matters before entering the hospital. To-day I wish simply to call your attention to him and make some remarks on the symptoms of his disease.

You notice that there is on the right thigh a small lump, in the course of the femoral artery. I place my hand on the lump, and I find that it pulsates. More than this, I find that the pulsation is not an up-and-down movement, as occurs when a tumor is seated over the course of an artery. When I place one hand on each side of the lump I feel the pulsation with both hands at the same time. There is therefore an expansile pulsation. Those of you who are familiar with the laws of hydraulics will infer from this that this tumor contains fluid, for you know that fluids transmit pressure equally in all directions.

Besides the peculiar character of the pulsation, we have other symptoms of interest. When I place my ear over the tumor I think that I can recognize a slight rustling, not a distinct bruit, as we often meet with in aneurism; for you will have inferred from my remarks that I consider this a case of aneurism. I am not surprised at not finding a well-marked bruit, for in small aneurisms this symptom is much less distinct than in larger ones. This bruit is produced by the blood entering the mouth of the sac, just as when you blow across the mouth of a bottle there is a peculiar rushing noise produced.

I do not observe any thrill over this tumor. From this I infer that the opening into the sac is at a distance from my hand. Mr. Savory, an eminent London surgeon, has pointed out that the thrill is most distinctly felt when the opening of the sac is on the side of the artery not towards the surgeon; in other words, if the opening were on the posterior surface of the artery, and the artery was betweeh the sac and the surgeon, the thrill would be more distinct than when the opening was on the anterior surface of the artery and the sac was between the artery and the surgeon.

There is another point which makes me think that this is aneurism. When I make pressure on the artery above the tumor, not only does the pulsation cease, but the tumor, from feeling solid and hard, becomes soft and flabby. Sometimes, by making pressure below the tumor, its tenseness and hardness are increased; but in this instance I do not observe any change from distal pressure.

From a consideration of these points, I believe that we have here an aneurism of the femoral artery. It is still quite small, and I think that we can effect a cure by compression above the sac. When the man returns I shall call upon members of the class to assist us in making compression, and we shall endeavor to effect a cure by digital compression.

I might say something in regard to the classification of aneurism, for this is a matter in regard to which the greatest confusion exists. Many different conditions have been known as aneurisms. We have the so-called cirsoid aneurism, or arterial varix. This is a dilated and tortuous condition of an artery something like the condition seen in a varicose vein. Again, there is the aneurismal varix, in which there is a communication between an artery and a vein without the interposition of a sac. This is one form of arterio-venous aneurism. Still further, we have the varicose aneurism. This is to be distinguished

on the one hand from aneurismal varix and on the other hand from the cirsoid or arterial varix. The varicose aneurism is also one form of arterio-venous aneurism, but there is between the artery and the vein a distinct sac. In dissecting a varicose aneurism you would first open the vein which would lead by a small opening to the sac, and then, on opening the sac, you would find a small opening leading to the artery.

Then there are traumatic aneurisms, or those resulting from wounds. The diffused traumatic aneurism is really no aneurism at all. It is the result of the rupture of an artery, by which the blood is thrown out into the cellular tissue; it is a subcutaneous wound of an artery. You may have an artery ruptured, a small amount of blood thrown out, and a sac formed by the condensation of the cellular tissue. This constitutes the circumscribed traumatic aneurism. It is an aneurism, clinically speaking, but its pathology is the same as that of the diffused traumatic aneurism. A true circumscribed traumatic aneurism is one in which there has been a wound of an artery which has healed, but subsequently the inner coat of the artery has given way at the seat of the cicatrix, the artery dilates, and an aneurism forms. Again, we have the hernial aneurism, where the outer coats of the artery are ruptured and the inner coat protrudes through the rent forming the aneurism.

Now as regards the ordinary aneurisms where there is no traumatic history. In this case the patient attributes this aneurism to walking. He is a mail-carrier, and has to be on his feet a great deal. He has had syphilis; but I do not think that syphilis has much causative relation to aneurism. I think that when they occur in the same case it is rather a coincidence. Aneurisms of this class (those arising from non-traumatic causes) are divided into true and false aneurisms. True aneurisms are those in which all the coats of the artery are involved. This is very rare, except in the fusiform aneurisms. Most aneurisms are at first true aneurisms, but as the sac increases in size the inner and middle coats give way, and the sac is formed by only the outer and perhaps a small portion of the middle coat. This constitutes a false aneurism. If the outer coat gives way we have produced a diffused false aneurism.

Besides this, aneurisms are divided according to their form into tubular, fusiform, sacculated, and dissecting, this latter being found only in connection with the aorta.

This patient will return to the hospital in a short time, and we shall then institute the treatment that I have suggested.

There is another symptom sometimes met with in aneurisms,—*i.e.*, diminution in pulsation below the sac. This has been explained by some as being due to the pressure of the aneurism; but the correct explanation is, I think, that it is due to the elasticity of the sac,—to what may be called the stand-pipe action of the sac. Those of you who are familiar with the hydraulic ram will remember that it contains an air-chamber. The water entering this air-chamber compresses the air, and the rebound of the air drives the water on through the long pipe, carrying it to the reservoir. The compressed air keeps the column of water in constant motion and prevents loss of power from interruption of the current. The same purpose is accomplished in our city water-works by the stand-pipe, in which the water is constantly rising and falling. Precisely like the action of the air-chamber is the action of the sac of an aneurism. The blood is driven into the sac, expanding its walls, which, contracting, drive the current on, and thus you have below the aneurism a more constant stream and with less pulsatile variation than above it.

EXCISION OF A PORTION OF THE TIBIA FOR DEFORMITY.

Here is a patient who has been in the hospital some time. Looking at his left leg, you see a remarkable deformity. There is a marked curvature of the tibia, and also some overgrowth or hypertrophy of the bone. He has not been able to give us any definite explanation for this curvature. He says that he sprained his leg, that it became painful, and that this curvature gradually occurred. There has been here an inflammatory action, an osteitis, accompanied by an excessive growth, which, as you know, frequently accompanies inflammation of the bone. Osteitis is one cause of enlarged bone. This overgrowth is usually only in the thickness, but sometimes also in the length. In this case, however, the tibia is shortened, which is a more common result than lengthening. This distortion renders the patient unable

to walk, except on the side of his foot. We sometimes meet with this deformity in early life as a result of rickets; but our patient is too old to be affected by rickets, and, besides, the condition is limited to one bone. There is no evidence of fracture.

What I propose to do is, after applying Esmarch's bandage and tube, to lay up a flap over the convexity of the bone, and then cut into it, either with the trephine or a small drill, to ascertain if there is any active inflammatory disease; and ultimately I shall probably remove a wedge-shaped portion of bone from the tibia, large enough to allow us to straighten the limb. Of course the limb will then be shorter than the other, but it will be much more useful.

I should say that before recommending an operation of this kind we have put the part at absolute rest and applied a plaster bandage to see if there would be any disposition on the part of nature to restore the limb to its proper shape; but there has been absolutely no change. The man seems to be in perfect health, except for this crooked leg. The fact that this deformity is limited to one bone would do away with the idea that it was due to syphilis or any other constitutional disease. It is probably the result of some local injury which the patient has not noticed or has forgotten.

If, after removing a portion of the tibia, I find that the fibula interferes with the straightening of the leg, I may be obliged to make a simple section of it. After the operation I shall place the limb in this bracketed splint, so that the dressings may be applied without any disturbance.

Operations on the bones are those of all others where Esmarch's bandage is useful. It prevents the flow of blood, which is profuse in these operations, and thus enables you to see what you are doing and to avoid injuring important tissues.

I now expose the bone by laying up a semilunar flap. The tissues over the bone are almost cartilaginous, as if this had been the seat of an old fracture. I now apply a small trephine, and if there is any active inflammation, if there is any pus, or if there is a sequestrum, I shall be able to find it. The cavity of the bone may be entirely obliterated. If I find no active disease I shall include the trephine-hole in the part that I shall remove.

I find that the bone is dense all the way through. I think that the best thing to be done is to remove a wedge-shaped piece of bone from the tibia. It will be safer—on account of the proximity of the tibial arteries—to do this with the chisel rather than the saw. In using the chisel I apply the side that is not bevelled to the part of the bone which is to remain, in order to prevent any bruising of the bone and to leave a smooth surface. I now have removed sufficient from the tibia; but I shall also have to divide the fibula. Having done this, I can easily straighten the leg. I find that the fibula has been broken, and that there is much overlapping of its fragments. This explains the case. There has been fracture of the fibula, with contusion of the tibia, followed by inflammatory softening and bending. The next thing to be done is to drill a hole in each piece of the tibia, pass a strong wire through them, and thus bring the two parts accurately together.

I now remove Esmarch's tube, so that if there is any bleeding it may be controlled before closing the wound. The wound over the tibia will require two or three stitches, and the wound over the fibula one. The splint is secured in position, and the foot is fastened to the foot-piece by adhesive plaster. The wound is dressed with simple olive oil, and over this oiled silk and oakum held in position by a roller.

Of course this operation makes a compound fracture, and the case is therefore one of some danger; for compound fractures are always more or less dangerous. If a simple section of the bone had been all that was necessary, it could have been done without an external wound, subcutaneously; but we could not remove a wedge-shaped portion of the bone in this manner.

TRANSLATIONS.

GUNSHOT WOUND OF THE BRACHIAL NERVES, WITH RESULTANT ATROPHY OF THE LIMB.—Dr. Oscar Israel (*Virchow's Archiv*, Bd. lxxxv. p. 110) gives the case of a man who in 1848, at the age of 20, received a gunshot wound in the left shoulder, entering the chest in the outer border of the pectoralis major and emerging in the lower third of the scapula. A month later, the patient was one day suddenly seized with a feeling as of a blow on

the head, and fainted. When he recovered consciousness, he was found to be paralyzed in the right side of his face, and soon after began to show signs of insanity, so that he had to be secluded. No further history, except of occasional alcoholic excess, is given until August, 1880, thirty-two years after the accident. At that time the patient was carefully examined, and was found to present scars at the point of entrance and exit of the bullet, and also on the inside of the left arm. The arm itself was markedly reduced in size, the forearm and hand being particularly emaciated. The thumb was extended, but passive motion could be made. Active movement was possible in the left shoulder-, elbow-, and wrist-joints. The first phalanges of the fingers submitted to passive motion, but the others remained very firmly flexed. The hollow of the hand was so atrophied that the tendons could be distinctly seen. Flexion and extension of the hand were possible, but abduction and adduction could not be performed. The temperature of the affected limb was lower than that of the opposite side. Direct electrical stimulation showed no change in the biceps, triceps, or in either portions of the deltoid; the extensor muscles were also normal in this respect. Direct excitation of the muscles of the ulnar region showed contraction everywhere. Indirect excitation, however, failed to develop contraction; only flexion of the forearm and dorsal flexion of the hand could be produced. Galvanic excitation also failed. Hearing was decidedly impaired, particularly on the left side. The usual symptoms of left facial palsy were observed, decided retinitis and "Stauungs-Papilla." The sensorium was unaffected. The patient complained of headache in the left parietal region. He remained under close observation for some months, showing occasional brain-symptoms, as headache, dizziness, etc., occasionally occurring in severe attacks.

The patient finally died with tremor, clonic spasms, collapse, and unconsciousness. The post-mortem examination failed to show the immediate cause of death, though a gliomatous tumor was found in the right cerebral hemisphere. The chief interest of the case centred in the condition of the nerves of the brachial plexus. The central ends of the divided ulnar and median nerves were adherent by means of a neuroma which had grown around them. The peripheral ends of the same nerves had grown together with the central stump of the cutaneus medius. The exact condition is illustrated in Israel's paper by means of the accompanying plates, together with a Teutonically minute and laborious description of all the lesions and alterations in the limb.

CHRYSAROBIN.—Chrysarobin, araroba, Bahia or Goa powder, as the material from which chrysophanic acid is made has been variously called, has recently been made the subject of further study by Lewin and Rosenthal (*Virchow's Archiv*, Bd. lxxxv. p. 118). Chrysarobin is derived from a tree growing in Bahia, British India, and the east coast of Asia, belonging to the family of Leguminosæ, and growing to the height of eighty to one hundred feet and over, with a diameter of three to six feet. In the fissures and cavities of this tree, which are numerous, is found most probably the araroba powder, in all likelihood a result of decomposition of the wood. It occurs in the form of a dull yellowish-brown, very finely divided and easily pulverulent mass, without taste or odor. Liebermann and Seidler have shown that the active ingredient of araroba is not chrysophanic acid, but chrysarobin, which is obtained by solution in benzole and repeated recrystallization from cold vinegar, in the form of small, yellow tablets. It is insoluble in water and ammonia, but is dissolved by concentrated sulphuric acid and strong caustic potassa, with a yellow color, and in the latter with green fluorescence. It is also soluble in chloroform vinegar, "petroleum-ether," and quite readily in melted fat and vaseline. Exposure to the air changes chrysarobin to chrysophanic acid by oxidation.

Under the name of Goa powder, this drug was first brought to notice by Fayrer in 1874 as a remedy for tinea tonsurans, chloasma, and intertrigo. Balmanno Squire in 1876–7 brought it more prominently into notice as chrysophanic acid, and in particular introduced it as the best local means as yet discovered for the treatment of psoriasis.

The use of chrysarobin has since then become quite general, and Neumann has said that since its introduction psoriasis no longer belongs to the diseases which trouble patients to an extreme degree.

No remedy has been introduced into the therapeutics of skin disease for ten years past which has given such good results.

The present method of its use in psoriasis is as follows. All scales are to be removed from the patches by soap baths, benzole, scraping, etc., and then a ten-per-cent. ointment is rubbed in in a thin layer, by means of a brush, twice daily. Ordinary cases begin to show improvement after three to six applications; but occasionally it may require several weeks to make an impression. The application cannot be made upon the face or genitalia with impunity, or at least without great precaution for fear of arousing irritation. The gradual diminution of infiltration shows itself in a loss of color in the centre of the patch, gradually extending to its periphery, so that in time the patch becomes whiter than the surrounding skin, which indeed is colored a reddish-brown color by the remedy. The scales become thinner and thinner, until finally a single sheet, like a gold-beater's skin, is all that remains before the patch entirely clears off. Occasionally the scales change to a yellowish crust, which is in time cast off, leaving the skin beneath in a nearly healthy condition. Around each white spot marking the seat of a former lesion is the brownish halo above spoken of, which often itches,—a sign that the employment of the remedy must be suspended for a time, or the skin will become irritated.

When chrysarobin does not agree with the skin, either from its excessive use or from some idiosyncrasy of the individual, dermatitis of greater or less intensity sets in, or occasionally a papular eruption or a crop of furuncles breaks out. In the latter portion of their paper, Lewin and Rosenthal give an account of the action of chrysarobin upon the body, which will be abstracted in a future number of the *Times*.

Poisoning by Boracic Acid.—The increasing employment of boracic acid as a topical application gives interest to the following communication from Dr. Molodenkow, of Moscow (*Cbl. f. Chir.*, No. 39, 1881; from *Wratsch*).

The first case was that of a man of 25, who, after thoracentesis, was treated by washing out the pleural cavity with five-per-cent. boracic-acid water, the operation lasting an hour, and fifteen quarts of the boracic-acid solution having been employed, a portion of which remained in the pleural cavity. Vomiting, weakness, with increase of pulse and temperature, and later an erythematous eruption upon the face, followed. Within a day or two all these symptoms grew worse, the erythema spread over the body and thighs, mother-of-pearl-like vesicles appeared over the face and neck, vomiting continued, weakness increased, hiccough and dimness of vision; finally, death on the fourth day.

The second case was that of a patient 16 years of age, suffering with an abscess in the region of the hip, which was washed out with five-per-cent. boracic-acid water, a portion remaining in the cavity of the abscess afterwards. Within a quarter of an hour uncontrollable vomiting began, and the patient died of exhaustion on the third day. Boracic acid cannot, therefore, be regarded as an indifferent substance,—at least when introduced into the cavities of wounds.

Two Fatal Cases of Poisoning by Iodoform.—Henry (*Cbl. f. Chir.*; from *Deutsche Med. Wochens.*, 1881, No. 34) gives an account of two cases occurring in the Breslau clinic, where iodoform has been largely and successfully used of late in the treatment of caries. The history of these cases showed well-marked cerebral symptoms, including intermittent drowsiness, finally ending in coma. In connection with these symptoms the patients suffered with paralysis of the sphincters, aphonic disturbance of speech, contracture of the muscles of the neck, and scaphoid abdomen, together with great frequency of pulse from the beginning. The temperature was normal. The acuity of the attack differed greatly in the two cases. In the first case death occurred on the second day, while in the second the patient continued in good condition for nine days during the use of the iodoform (externally); then headache and somnolence occurred for two days, death taking place on the sixteenth day. Fatty degeneration of the heart, with cloudiness of the liver and kidney, were shown post mortem.

Resorcin in Cholera Infantum.—In Breslau ninety-one cases of cholera infantum were treated with resorcin in the dose of one-third to one-half grain in two ounces of infusion of chamomile. The success of this treatment was remarkable. How often the dose was given is not stated.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, DECEMBER 17, 1881.

EDITORIAL.

A CHILD OF MODERN WANTS AND MODERN MEANS.

DURING the recent war of the Rebellion, driven by stress of circumstances, our government was at first almost glad to accept the services of any one who came with a medical diploma in his hand. It does not follow from this that all the applicants, or even most of them, were men of inferior attainments or with a low capacity for good and humane work as surgeons; but it is nevertheless incontestable that too many of them were. Still, at first, there was nothing to do but to keep on accepting and regretting at the same time. This was no fault of the doctors. The public was satisfied with the standard of medical education; and the doctors themselves invested in their profession all the public would appreciate. Let the truth be told. Too often men of liberal education and of liberal profession would both vaunt and patronize those whose ignorance and quackery were conspicuously blazoned in every act.

Besides this, the wants of sparsely-populated regions were such that doctors must be found; and this, too, had its full share to do in flooding the land with men to whom another year of study would have been of great service.

But at last we have grown clear beyond either of these unfortunate necessities; and a full, fair recognition of the fact that the country needs as physicians men of the most gentlemanly instincts, of the finest natural abilities, and of the very highest culture, is now apparent.

Three years to make a good mechanic and a year and a half to make a doctor are arithmetical proportions that modern society has become quite tired of. Even the seven branches which a score of years ago were regarded as filling absolutely full the armory of the doctor came to be first taught more thoroughly, and then later were supplemented by others which were reckoned of prime importance either as preparatory to medicine or as of value in its higher walks.

There are a goodly number of such supplemental branches. The latest step in advance is that of the University of Pennsylvania, where a course "preparatory to medicine" is now in active operation, and, so far as present indications go, promises well,—so well, indeed, that increased facilities will be required inside a twelvemonth. The idea of the course is exactly expressed in the title, *preparatory to medicine*. To work out, however, the largest measure of usefulness, it may be taken in two ways: first, any student having a fair English education may enter and take such branches as it is decided will be of most use to him. Thus, he may divide his time between chemistry, botany, and zoölogy. It would, however, be strongly urged, unless well grounded in Latin and one or more modern languages other than English, that he take these also. *Such a course leads to no degree*, and the student may pursue it one, two, or more years, as he desires. It is plain that it would be a most useful introduction to his life-work. The mere habits of observation formed under such training would be invaluable in after-life.

Besides this, the regular matriculant of the Towne Scientific School in the University may, at the expiration of his second year, when it is assumed that he has by the discipline of study laid a solid foundation of fact and of training, and, besides, earned the right to settle upon his own future career, decide whether he will for the regular course of training substitute that of the preparation for medicine. If he

decide for the latter he ought still to follow the curriculum closely enough to round his general culture into accordance with what we know as a liberal education. He simply takes, instead of branches which are of general importance, those which are of special importance to him as a doctor, and at the expiration of his regular collegiate term receives, if found worthy, the diploma of the University.

It is obvious that, with men of equal capacity and earnestness, those who take the latter course will be the better prepared for a full appreciation of the literature and duties of the profession. It is equally obvious that those who take the former will have a training in advance of that which has been possible hitherto. The very foundation of the course is laid in the idea that the student is in training for original investigation,—that he must exercise his best powers of observation and his most critical judgment at every stage of his study. This alone would be a tremendous vantage-ground in the future struggles of a close competition between young medical men. The general principles of chemistry once gained, how easy is the mastery of medical chemistry! With physics properly comprehended, ophthalmology becomes a rational science, instead of mere routine work. Zoölogy is the solid foundation on which the future surgeon may rear his superstructure of anatomy. When one considers that fully two-thirds of the remedies by which we hope to arrest or cure disease come to us from the vegetable kingdom, and that of these the vast majority are from our own land, the propriety of knowing these when one sees them is so clear that it were a waste of words to discuss the proposition at all. We are assured by those who have the teaching of this new department in charge that, after a full, fair grounding in the means and methods of study, the pupils will be systematically taken over, *in the laboratory*, all the more important practical relations of the several special branches preparatory to medicine. This implies a slow, orderly course of instruction, with ample time for critical work. In so far as this is well done it will aid in relieving the student of the excessive mental strain which characterizes the three winter sessions in the proper medical course.

A NEW OPERATION FOR EXSECTION OF THE INFERIOR MAXILLARY NERVE IN THE SPHENO-MAXILLARY FOSSA.

AT the Hospital of Oral Surgery an operation for this exsection was practised by Prof. Garretson at his clinic, November 19, in a manner which, in the ease and certainty of the performance, places the matter in an entirely new position and converts complexity into simplicity.

After making the required trapway by dissecting the masseter muscle from its attachment to the ramus of the lower jaw, a cylindrical drill half an inch in length and the same in diameter was inserted into the mandril of a powerful surgical engine; and by it in revolution to the extent of five thousand times in a minute, the nerve was quickly laid bare to its place of entrance into the bone at the posterior dental foramen. Next, the opening being enlarged until the pterygoid muscle was fairly exposed to view, the nerve was cut at the site of its inferior exposure, and, being lifted from its bed and held on the stretch, the handle of a scalpel was made to isolate it up to the point of emergence at the base of the skull. It was there excised, a pair of delicate iris scissors being used.

The ease with which this most complex operation is performed after the manner described requires to be seen to be appreciated. The impression produced on the large number of students and medical gen-

tlemen present was marked. It will surely divest the operation of the fear and hesitation always felt by the surgeon undertaking it.

EDITING OF ENGLISH MEDICAL WORKS.

WE recently published a review of the American edition of Holmes's Surgery, which has attracted some attention and has been thought in certain quarters to reflect unnecessarily upon the American editors. It was our wish to express very decided views in regard to the publication of the book, but we did not desire to include the American editors in a wholesale denunciation. The system of publishing English medical works which has grown up in this country is nothing more or less than legalized buccaneering: it is appropriating other people's property by sanction of law, and giving them no return therefor. Its practice by men whose lives are otherwise honorable is a marked instance of the weakness of human nature and of the necessity of law as a trainer of human conscience. Almost always in these cases the editor is the cat's-paw; and it is very curious that medical men—the writer of this in his early days among them—allow themselves so to be used, apparently without perceiving that they are being burned. These editors are underpaid,—usually with a miserable pittance flung to them,—are in most cases men of upright intentions, but are simply without thought following in the footsteps of their predecessors. Is it not time that some one should put this matter in its true light? Is it not right that we medical writers all should understand exactly how we are being used by publishers, and how we are unwittingly at the same time injuring our colleagues across the water and our own higher professional interests in this country? Men will not write medical books unless there is a prospect of success; and how can success be achieved by a book loaded with a copyright pitted against one stolen from English brain and having therefore only one profit to pay?

We regret very much that this discussion should seem to centre upon the editors of Holmes's Surgery, as they are a body of honorable men who have had very low wages for conscientious work, who have been following simply in the line of old custom, and who, if they had seen the matter in the light we see it, would, we believe, never have been editors of the book. Being ourselves in this matter not without sin, we desire to cast no stone; but the discussion has to turn upon some pivot, and we hope it will now go on and widen until the whole profession appreciates the fact that a good name is not to be connected with such a transaction, and publishers become unable to get foremost men of the profession to prepare English books for the American market unless a fair compensation is paid to the original author.

CORRESPONDENCE.

LONDON LETTER.

IN this communication other matter than pure medical matter, or at least but collaterally related to it, will be considered. Yet let me not be too hasty. There has appeared a new medical periodical,—an event so common and ordinary with you as to excite none other than a local interest. This is designed for the medical student, who requires something more than a given number of dry text-books. There has been in existence some time a *Students' Journal;* but the new bantling is weekly, at the easy price of one penny. Besides solid matter it gives an account of sports and recreations,—as students' foot-ball,—and an account of a theatre in No. 2. Whether this periodical is to develop into a standing guide to medical students, so that they may be instructed how to avoid naughty plays, or not, it is not for me to surmise. It is a respectable paper, promising to live,—as of course it ought to do, when I wrote the first leader for it on "Taking Pains." If it were not for the remembrance of the recent *Medical Examiner*, which survived the period of teething, but sank of marasmus later on, chronic hydrocephalus,

and a complication of diseases, the outcome of malnutrition, I should be very hopeful of it. Well, this new babe seems a lusty, vigorous infant, with a better constitution than the poor *Examiner* manifested. It is launched respectably, and seems to deserve the best wishes of all.

Now to the subject-matter proper of this letter. Food is allied to medicine; and the subject of food is not an altogether inappropriate topic for my letter. Probably you on the western shores of the Atlantic are aware that John Bull has for some time been dependent on foreign countries for a great portion of his food. First he got flour, then he got tinned meats, biscuits, preserved fruits, and ultimately fresh meat itself. We will not enter into the subject of live-stock. Those two wilful men Cobden and Bright made such a disturbance about the tax on bread, and talked so glowingly of the cheap loaf, that the tax on corn was repealed, and foreign breadstuffs began to pour in fast. This was convenient in the year of the potato-famine in Ireland. Then came the cotton-famine, when the looms of Lancashire stood idle because the Northern cruisers prevented the cotton of the Southern States getting to Liverpool; and again the light price of foreign breadstuffs was a boon to the Lancashire folk, "clemming," as they prefer to call hungering. However, John Bull did not mind this dependence on foreign supplies so long as his agriculturists at home were thriving. Rents were up, landlords flourished, farmers were sleek, and the field-laborer took to agitating for more wages, and mostly got them. But all this prosperity was suddenly checked. A wicked American took the weather in hand, and predicted us a lot of bad weather, most of which came punctually to time, just like a bill. The Conservative government forgot to look after the farmers' interests; and bad harvests followed. In 1875 farms could hardly be found for the numerous applicants; yet 1881, on its arrival, found wide tracts of fertile land without a tenant upon them. Even in rich agricultural districts, where farmers were all well to do and "had money put by," crash came after crash,—first one, then another,—till many a country doctor had to pull himself together, and the wholesale drug firms could only get a moiety of their accounts paid, and not always even that, it is to be feared. Other—textile—productions, too, had overstocked the markets. The United States of America, from buyers, had become manufacturers; India was putting up cotton-mills of her own; John Bull's articles were falling off in quality: indeed, the cheery old chap has been having a bad time of it. So imported foods were becoming more popular: even domestics found them edible; and after the inmates of one workhouse (not the officials, but the paupers) had struck against tinned meats, but found at last that even they were preferable to starvation, the verdict was pronounced that tinned foods were to be accepted as part of the things that must be in this imperfect world.

Last year a "food show" was held in the great agricultural hall at Islington. This was perhaps rather cruel to the English agriculturist, and wounded his feelings somewhat; but when people are not prospering their feelings ought normally to become correspondingly insensitive. Only prosperous people should possess feelings which might be wounded. Again, this year, Mr. John Black tried his hand with another, which has been more successful still. Four judges were necessary: so Dr. Danford Thomas, the coroner, and Dr. Bartlett and Mr. Wigner,—both analytical chemists,—and myself were asked to take up the judicial duties, which we did. We set to work manfully to get the thing done honestly and squarely to the best of our ability, myself feeling all the more the demand upon my integrity for the remarks I had penned about the decisions at the International Medical and Sanitary Exhibition, when the United States exhibits were treated so scurvily. The chemists undertook the analysis of all articles: so into that it is needless here to enter. Feeling the desirability of getting through the non-alcoholic drinks, we started with them; and a host there were. The proportions of iron in some beverages had been too large; but now they were reduced. Some did not contain iron at all, but the red cinchona bark was used instead. Why the "red" bark should be preferred to any other for the needs of the inebriant it is not easy to see; but it has got a reputation for that purpose, that is certain. Effervescing beverages, palatable and middling, there were. Then the lime fruit was prepared in a variety of ways, till there was no scarcity of antiscorbutics. Vegetable-flavored essences of many kinds were also exhibited. Pure aerated waters were pressed upon our notice, not, however, absolutely free from other elements than hydrogen and oxygen, plus a little carbonic acid. Then there was milk prepared as koumiss, and peptonized milk (home products), while a Swiss firm exhibited some more or less condensed milk in bottles, which were fairly drinkable. But the secret of preserved milk and cream has not been fully revealed yet; at least, so it has appeared to me. Then there was a lager beer which would not have attracted much custom in Vienna, but which was fair after its journeyings. A Copenhagen lager stall was put up, but not in time to be available for award. So its qualities are unknown,—at least to the judges. These last were not exactly temperance drinks in the strict sense of being innocent of alcohol, but they were calculated to favor temperance. These beers were partaken of in moderation, that is certain. "Well begun is half done:" so, having made a fair start, we lunched to-

gether with the representatives of the press; and some of the exhibits, notably a pork-pie of goodly dimensions and excellent flavor, formed a part of the viands. Speeches followed, of course, and one judge roused an indignant protest from myself for the disrespectful manner in which he spoke of starch as a constituent of our food. I reminded them that it was starch as glycogen, or animal starch, that was the food of man *par excellence*, stored up in his liver and given off as required for the body's requirements. After the exhaustion of hearing others speak, we were glad to adjourn our judicial labors till next day. Then the judges' room was pretty crowded, especially with fluids. Is it that fluids do not require mastication, and so present little difficulty in swallowing, which causes them to be favorite subjects for repeated examination? Zoedone was a prominent figure, surrounded by many imitators. Indeed, suspicions are being aroused that the teetotaller is a very thirsty fellow, and fond of a palatable drink too, it appears. Since it has been definitely settled that ginger-pop contains alcohol,—as it must, since the sugar is broken up by the yeast into CO_2 and alcohol,—since this discovery, then, has been made, the teetotaller has gone earnestly in quest of some new effervescing beverage, and the chemist has set to equally earnestly to provide him with a variety. So there were many beverages to be tested otherwise than analytically; and in the early hours of the day these guileless fluids were in demand. But let the sneerer suspend his pharisaical judgment: it is not asserted that our personal experience was confined to these temperance drinks, or that other fluids were entirely ignored. The arcana of the judges' room are not to be rashly revealed; but there was a fluid hight "whisky curaçoa" which seemed deserving of notice; nor is it suggested that its claims to consideration were ignored, since repeated samples were requisite to a judicial verdict. Then the wines of Australia were worthy of careful consideration, and upheld creditably the reputation they have won elsewhere. Some Hermitage grown from Burgundian vines seemed to possess a certain fascination for myself when my labors were drawing to a close and some alcoholic beverage seemed indicated. Nor was one observation sufficient for the end sought. Each day a little was tasted, in order that the verdict might be a deliberate one; and a favorable verdict it was. Some Italian wines of champagne character seemed very good indeed at the price. Then there were various exhibits of tea, coffee, and cocoa; and they were tested by tasting too. Messrs. Phillips had a regular kettle-drum, at which the judges presided. Chinese teas,—some curiously rolled into horse-bean-like masses, and said to be the drink of mandarins only; teas from Assam, Indian teas, and a block of tea like a piece of an old plank,—a specimen of a tea in favor in some Asiatic area. Cocoa was exhibited in many forms,—nibs, powder, chocolate, cocoa, hot and palatable. It is not for want of variety or enterprise in the manufacturers if cocoa does not become a popular beverage. Then the specimens of beef-tea and soups to be tasted,—some fairly good, others indifferent. One, to me, very interesting exhibit was a little tin holding about a quart, to look at. Within the tin was a non-conductor, and within the pot, containing the beef in small pieces and the water, was placed, and the lid screwed on. The whole was then placed in a pan, and this pan was heated. What the inventor claimed was this: however heated the pan might become, the contents of the internal pot were safe from overheating, in consequence of the non-conductor, and so the beef-tea could not be spoiled by the ignorance or stupidity of the cook. The exhibitor was a funny little mannikin, who lunched upon his own beef-tea with evident gusto. He showed us his children who were fed upon it, and dilated with enthusiasm upon the good effects of the beef-tea, which had cured (?) his wife when three doctors had given her up with heart disease. (This is another illustration of what I often speak or write about,—viz., that the prognosis in many cases of heart-trouble is unduly grave and the seriousness with which they are regarded not quite warranted by the facts of the case.) We tasted it, and right down good, wholesome beef-tea it was too. That was the unanimous verdict of the judges, aided by their spouses, who also bore a hand at the tea-tasting. Indeed, that part of my duty was delegated to a much more competent authority on the matter than I profess to be. The beef-teas were tested in turn, and the soups too. The exhibitors have no ground of complaint on that head, either the successful or the unsuccessful. But, if I personally did not take an active part in the tea-tasting, my tasting experiences in other matters were by no means limited. Possessed of a faultless—indeed, almost too perfect—digestive apparatus, the duty devolved upon me of testing various comestible exhibits. The claims of rival pork-pie manufacturers could only be settled by actual eating of some of their preparations: so sections were made and the examination proceeded with. Then sausage-rolls. At last that division was completed. Then there were cheeses of various kinds,—Gorgonzola, Gruyère, Roquefort, and the little green Swiss cheeses made with herbs and grated on bread-and-butter; and, oddest of all, a cheese from Zululand, made by one of King Cetewayo's wives, or queens, and enclosed in an ox's bladder or some pouch-like appendage regionally near to it. This last was not tested, but only looked at with reverent curiosity and because the outcome of queenly labor. Butter, too, was exhibited, some from Milan, some made on the premises, without any

handling, by the Aylesbury Dairy Company. A most modern churn, involving a minimum of labor, made the butter; then it was placed on a circular board and rolled to squeeze the water out of it. Nice, clean, sweet butter it was, too; for when trying the diabetic breads and biscuits it was found impossible to get on with the testing without some addition; and some of this fresh butter helped them down capitally.

Now, this is an authoritative if informal expression of opinion from a judge at a food show: diabetic bread and biscuits, free from starch or sugar, may be of the highest utility in certain and sundry cases of disturbance in the glycogenetic functions of the liver, but from a gustatory point of view there is absolutely nothing to be said for them. The first diabetic biscuit I ever ate was eaten from strict curiosity; and the verdict elicited by the trial was, a diabetic must either be desperately afraid of dying, or have some monstrously strong reason for living, if he can eat that. Now, without wishing to assert that the articles on exhibit were all as repulsive as that biscuit was, it is certain they are not attractive to the palate, the almond biscuits being far the least objectionable. *Per contra*, there were some Scotch oatmeal biscuits by no means hard to swallow, and some biscuits from a Philadelphia firm (Walter G. Wilson) which were admirable in every way; also vanilla cream, butter Scotch, toast, and many more which excited much commendation.

Of preserved meats, tinned meats, fish, fruits, and vegetables the exhibits were good. High above all towered the arch whose pillars were built of tins of preserved foods, of Messrs. Thurber & Co., of New York, whose most recent rolled tongues in tins were all that could be wished. Indeed, a careful survey of this exhibit tells us to what proportions the preserved-food business has already grown. At a little distance was an unpretending stall of small proportions, where Brand exhibited his preparations for the invalid, many of unsurpassable excellence. A little away was a stall of herrings from Yarmouth, exhibiting the various methods of curing this cheap but toothsome fish, perhaps a little too fragrant at times. Anchovies, prepared in oil, in pickle, and otherwise, were exhibited at another stall, along with other nice things, including mignonette pepper, an agreeable condiment certainly. Then beyond these foods ready for table were a number of exhibits of flour, and of baking-powders to raise the said flour when made into dough. In one instance the raising-powder and flour were mixed ready for use, requiring only the admixture of water. These baking-powders have been found very useful in times of war: of that there exists no question. But how far they are likely to take the place of German yeast in ordinary households it is not yet very certain to say. They were tested by weighing out a given quantity of the yeast, or baking-powder, with a certain quantity of flour, and our own baker working the dough, then marking the piece of dough and letting the exhibitors bake it into a loaf, and then comparing the respective loaves. These powders consist of some chemicals which disengage CO_2 when moistened in the dough; and the resultant bread, with its large air-vesicles and fibrous fracture, resembled closely the bread which once was fashionable, made by mixing muriatic acid with carbonate of soda in making the dough. So far as could be seen, this bread has no advantage over that raised by yeast, except the convenience of preparation. We were not prepared to test the samples by eating, for, though a little intestinal disturbance was all the ill effect produced by previous experiences, I did not feel equal to trying these new-made loaves raised by chemicals. The flours varied in quality, some containing notable quantities of alum. Why exhibitors put themselves in a questionable position by sending adulterated articles to be judged at a show it is impossible to say. If they adulterate their articles, surely it is not prudent to send them where detection is inevitable. Pure articles ought to be sent to an exhibition, whatever is sold ordinarily. But even that dodge is not quite safe from detection, as in cases where suspicion existed samples were bought at shops far away and compared with their twin brothers in the exhibition.

Such, then, is the record of a form of exhibition which must become more and more common as the use of preserved foods extends, and with that the various preparations of such foods.

By the awards at these exhibitions are the purchasers of tinned and other preserved foods to be guided in their choice, and to some extent protected against deception as to the quality of the goods they select,—the man laying in a store of food for use in an outlying sheep-farm or ranch; the miner, far away from much choice of provisions, perhaps too ignorant to select for himself. By the prizes given to an exhibitor, in after-years some others will be encouraged to show against him, in the hope of excelling him; and, more than all, by the justice and fairness manifested by the adjudicators will all exhibitors and purchasers, as well as manufacturers, in the future be stimulated to do their best,—the one to sell a good article, and the other to show some rational discrimination in their selection. And as Great Britain fails more and more to be a self-feeding country, as seems certain to be the case, the supplies from far-distant countries will require supervision, with commendation for what is approved, and the silent negative condemnation of no award for what is unsatisfactory.

J. MILNER FOTHERGILL.

PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A CONVERSATIONAL meeting of the Society was held at the hall of the College of Physicians, Philadelphia, October 26, 1881, Dr. Albert H. Smith, President of the Society, in the chair, at which Dr. J. T. Eskridge read a paper on the "Pre-Physical Sign Stage of Phthisis Pulmonalis," and received the customary vote of thanks.

DISCUSSION.

Dr. Carl Seiler requested the lecturer to define what he meant by the term "predisposition to phthisis," which he had used several times in his paper, for, unless the position he takes upon this point is more clearly defined, his so-called premonitory symptoms do not amount to much. From the lecturer's remarks it would seem as if all his premonitory symptoms only pointed to a lowering of the vitality. The increase of pulse and temperature, and the hoarseness, however, are not pre-physical signs, but actual symptoms of the disease.

He also inquired what is meant by a bad family history. Does he mean the surroundings of the family, or existence of actual disease, and, if so, what disease? Does he believe phthisis to be inoculable? Unless he defined his position upon these points, not much could be made out of so-called premonitory symptoms. He also said nothing about the difference between miliary tuberculosis and ordinary phthisis, or between primary tubercle and inflammation of the lung followed by tuberculosis, where tubercles were not the cause of the inflammation.

Dr. Jas. C. Wilson said that the topic was not only important but also a difficult one to discuss. The lecturer had rather enhanced the difficulties by his mode of treating the subject, especially by not distinguishing clearly the varieties of phthisis. Personally, he had seen many if not all of the symptoms that the lecturer had set down as premonitory signs of phthisis appearing in patients who did not afterwards develop phthisis. On the other hand, he had seen rapid well-marked pulmonary phthisis in patients who, up to the time of the occurrence of the acute lung-trouble, were apparently in perfect health. He could not agree with the lecturer in the statement concerning the non-existence of one symptom to which attention had been especially called by the old writers,—*i. e.*, a patient liable to the development of phthisis usually has a dislike for fatty articles of diet. Dr. Wilson had for a number of years made a habit of inquiring into this peculiarity, and had found that a large proportion of consumptives answered the query in the affirmative: patients suffering from phthisis who had been in the habit of eating habitually a large amount of fat at the table were relatively few in number. He believed that in this instance the older writers were in the right.

Dr. F. Woodbury said, if a person be sick with tuberculosis, he must be already tuberculous; and, since tubercle is an entity, an actual deposit must alter the physical conditions of the organ in which the deposit takes place, just in proportion with the amount deposited. If our methods of physical examination were sufficiently exact and searching, the most minute physical changes might be recognized; if they are not, if we fail to recognize changed physical conditions in the lung, it is from want of refinement in our means of diagnosis. It is not to be denied, also, that in the post-mortem room tubercular deposits are found in various organs of the body the existence of which was unsuspected during life. In these instances, while the ordinary *symptoms* of phthisis were absent during life, the *physical signs* doubtless could have been detected. Tubercles, moreover, may often be demonstrated as existing in the choroid and in the larynx before they are ascertained to exist in the lungs; they have also been found in the peritoneum of a women during ovariotomy, although phthisis had not been suspected. Certainly there is no room here for a hypothetical pre-physical sign stage of consumption.

It is hardly supposable that there should be a pre-physical sign stage to inflammatory lung disorders; while, on the other hand, if the lecturer meant pulmonary tuberculosis by the term "phthisis" he should at least have excepted the acute miliary variety, which gives a clinical history so different from ordinary phthisis as to remove it entirely from the group of local pulmonary diseases and to warrant its consideration among the acute constitutional affections, like the specific fevers. In a case under the speaker's care at the German Hospital, a male nurse—who, previously in good health, though overworked, had a history of dissipation and syphilis several years before—was seized with severe lumbago. After remaining in bed for a short time, it was noticed that he had afternoon fever, and the thermometer indicated 103° to 105° each afternoon and 99° to 100° in the morning: in other words, he had a continued fever. He had absolutely no cough nor other pulmonary symptoms, nor was there delirium nor diarrhœa. On account of the fever, the case was pronounced by several physicians to be one of typhoid fever. Upon deep percussion, the speaker found a slight increase in pitch, without marked dulness, especially anteriorly, over the right lung; the breathing was not harsh, expiration slightly prolonged; this was so slight at first as to forbid a positive statement of the fact, but from the hectic, and absence of diarrhœa, rose-spots, and brain-symptoms, the case was regarded as probably

one of acute tuberculosis. The patient died about nine weeks afterwards. At the autopsy the diagnosis was verified; the right lung and upper part of the left lung were solid with miliary tubercles; a piece of the pulmonary tissue sunk in water.

The symptoms relied upon by the lecturer to establish a special first stage of pulmonary tuberculosis merely indicated a failure of nutrition, such as might occur in many other disorders. It is usually acknowledged that such a state may favor the development of tubercle without being directly a part of the disease. Imperfect assimilation of food always produces wasting of the tissues,—as in stricture of the œsophagus or gastric cancer. Pulmonary disease is likewise accompanied by a defective primary and secondary assimilation. In some cases of phthisis the constitutional symptoms (the anæmia, wasting, and fever) are very much out of proportion to the local disease in the chest; in others, the lung-structure suffers relatively to a much greater degree, the system at large not being much disturbed; or, indeed, the disease may be for a time quiescent and the patient actually gain in flesh.

Since the word "phthisis" only indicates one feature of chronic pulmonary disease, and one by no means peculiar to it, and since much confusion of the subject is caused by applying the title at one time to a single disease and at another to a group of diseases, the speaker urged that the term "phthisis pulmonalis" be either restricted to chronic pulmonary tuberculosis or be discarded entirely from scientific discussion.

Dr. Eskridge, in closing the discussion, said that he had not brought the subject before the Society expecting to indicate definite means whereby consumption may be recognized always before its presence can be demonstrated by physical signs, and it was stated in the paper that a diagnosis made prior to the physical sign stage was, at best, often only approximative. He could not agree with Dr. Seiler that the symptoms were too indefinite to have any practical value. Was it not by the vague and ill-defined premonitory symptoms that the skilled physician learns to recognize typhoid fever before the characteristic image of the disease is portrayed by the symptoms? The care that is important in the early diagnosis of this fever or other allied maladies is doubly important in the early detection of phthisis of the lungs, seeing that the treatment, after this stage is passed, avails but little. These premonitory symptoms connected with disorder of the system pointing towards pulmonary involvement constitute a deviation from a state of health, and he would so define the term "premonitory symptoms of phthisis," the early recognition of which he considered of great importance. During the discussion Dr. Woodbury had said that, no matter what value the early symptoms that precede some cases of chronic phthisis might have, it was certain they could have no practical value in the diagnosis of miliary tuberculosis. Dr. Eskridge had never had the opportunity of watching such a case several weeks prior to the outbreak of the disease, but he could not see why such a form of the disease should not be preceded by distinct symptoms, which would be manifest before physical signs were present. Dr. Ringer had observed a considerable rise in the temperature early in the history of similar cases.

As regards the nausea or loathing produced by eating a small quantity of fat with the lean meat of the food, he had not discarded it from the roll of symptoms, but he could not agree with Dr. Wilson in laying so much stress upon so variable a symptom. He never had treated an anæmic dysmenorrhœic female who had not a dislike for fatty articles of diet. It is a common symptom in ordinary anæmia, but according to his experience it is absent as often as present during the pre-physical sign stage of phthisis. He thought it more commonly preceded the development of acute than of chronic consumption.

He agreed with Dr. O'Hara in that a quick irritable pulse is found in many diseases other than of a tuberculous nature. It is its association with many other symptoms of the disease that gives it importance, especially when it is modified by changes of weather. In a person suffering with a cough, a vibratory and more or less accelerated pulse, which becomes more marked in all its abnormalities during damp weather, should make us apprehensive of some pulmonary trouble, unless such a symptom can be accounted for by disorder in other portions of the body.

It had been said that when a patient is sick with tubercular disease he is already tuberculous: nothing could be truer, and the fact was plainly stated in the paper.

With reference to the use of the spirometer to test the vital capacity of the chest, he could not speak from much experience, but this he knew, that a person must first learn to blow through the instrument, and that by practice one could greatly increase his vital capacity, as shown by the register, without preventing the development of phthisis. The man, an athlete, a native-born American, who performed in London the extraordinary feat of exhaling over four hundred cubic inches of air, died of consumption of the lungs a few years after making an exhibition of his unusual vital capacity.

This paper was not hastily gotten up for the occasion, but was gleaned from the clinical histories of hundreds of cases of phthisis which he had carefully watched both in private and charity practice. At the Catharine Street Dispensary every phthisical person, and every one presenting the least symptoms of the disease, is weighed, and the temperature, pulse, and respiration, with the other

symptoms, are recorded by himself before treatment is begun. Records of cases during the early stage are made twice weekly, later bimonthly. He believed by comparing the evidence thus obtained from the clinical history a diagnosis might be made and proper treatment instituted early in the disease.

SOCIETY FOR MEDICAL IMPROVEMENT, BOSTON.

A CASE OF PYÆMIA OF OBSCURE ORIGIN.

Reported by Dr. Francis Minot.

November 15, 1881.

THE patient was a married lady, aged 47 years and 9 months, who had four children. Her temperament was very nervous; she formerly was hysterical: was intellectual and cultured. From childhood she had no especial constitutional disease. Her periods were always regular. During summer preceding her death and while at the sea-shore she suffered from a succession of boils, no other member of the family being ill. After her return to Boston she spent two nights in Newport in a house which was isolated and apparently in good condition, there having been no case of illness therein before or following the lady's visit. Soon after her second return to Boston she complained of pain of wandering nature and sleeplessness. At Dr. Minot's first visit he found her feverish, tongue heavily coated. After a few days the first and second joints of little finger of right hand became swelled and painful, the patient being somewhat hysterical. There was also pain in the calf of left leg. During the next few days she became very despondent and did not wish to live. On the sixteenth day a swelling appeared in the little toe of the right foot, plantar surface. It was afterwards incised, and discharged healthy pus. Then followed pain and swelling of the abdomen, but there were no signs of typhoid,—merely flatulence. Now occurred a swelling and hardness of the left calf, with a good deal of pain, followed soon after by a small, tender swelling in each axilla. Patient's mind began to wander. By the twenty-seventh day she was "quite out of her head." On the twenty-eighth day an abscess burst in the right axilla. Another was forming in the left. On the thirtieth day there was complete dementia, accompanied with sobbing, crying out, etc., and writhing movements of trunk and limbs. Discharges from rectum and bladder became involuntary, and the patient resisted all nourishment. A regular and progressive increase of the malady now became very manifest. Pulse 130, respiration 60, and gradually increased until the day of death. Patient was now fed by the rectum. There were abrasions on the heels and ankles from incessant movement.

On the forty-first day an abscess burst in the left axilla. Breasts hard and painful. Seventieth day, râles heard over lower back, but no dulness, nor bronchial respiration, nor cough. The left calf was still swelled, hard and tender, but not red; did not fluctuate. Pigmentary spots appeared on the legs, abdomen, etc. (patient was a brunette). There was desquamation of the feet and legs. A comatose condition came on, and death followed on the seventy-fifth day. There was no chill nor paralysis at any time.

On the eighteenth day the *urine* showed a sp. gr. of 1012; acid; urea much diminished; uric acid increased; phosphates and indican diminished; much free renal epithelium. On the twenty-first day urine showed no change. Ten days before death it contained much pus and a few granular casts.

There was great difficulty in obtaining the *temperature*. Generally it was only moderately high (102.5° F.) until the thirtieth day, when it reached 103° F., the abscesses being then discovered in the axillæ. Subsequently remained below 102° F. until sixty-sixth day, after which it rose daily, increasing at evening. The day before death it reached 106° F. At first the *pulse* was 108–116. On the twenty-ninth day it rose to 120, in keeping with the temperature. From sixty-first to seventy-fifth day it rose to 132, and finally to 144. The *respiration* varied, as the case went on, from 41 to 62 between the twenty-third and sixty-first days; subsequently reached 70, and sometimes 86, falling gradually on the last day into the thirties.

Autopsy, by Dr. E. G. Cutler, twenty-three hours after death.

Brain.—Some of the convolutions atrophied, and sub-arachnoid fluid correspondingly increased; otherwise, skull, brain, meninges, and cerebral vessels normal.

Heart.—Recent and slight fatty change in papillary muscles; otherwise normal.

Unimportant fatty degeneration in aorta near valves.

Lungs.—The left slightly œdematous in portion of upper lobe. In lower portion, in front, a wedge-shaped embolic infarction with softened centre. Corresponding pleura thickened and covered with false membrane. In lower lobe, behind, localized and recent lobular pneumonia. Bronchi contained a frothy secretion. Right lung also showed localized pneumonic lobules. No embolic infarctions, but the lung markedly œdematous.

Spleen pulpy, Malpighian bodies large and hyperplastic, as also splenic pulp. No embolic infarction.

Liver engorged with blood. The acini moderately distinct and rather large. Microscope revealed granular condition of hepatic cells and some icteric discoloration.

Kidneys contained old embolic infarctions at centre, spots being very small and circumscribed. Many tubules contained casts.

Supra-renal bodies normal.

Stomach and intestines normal.

Mammæ.—In the left, small, circumscribed abscess. In the right, abscess containing about three ounces of creamy pus.

The calf of left leg showed nothing to account for its symptoms during life.

Dr. Minot explained that though he called the case one of pyæmia it differed in certain respects from typical examples of that disease, notably in the absence of chill and of pus in the principal internal organs, also in the prolonged course of the illness. But the progressive depression of patient and her nervous and mental condition, without adequate inflammatory symptoms and lesions, made it possible that her blood was in an abnormal state, which the pus beneath the integuments and in the breasts, and the embolic infarctions in the lungs and kidneys, would indicate as one of purulent infection. Treatment consisted in forced nourishment and stimulants, quinine, potassium bromide, and morphia, the latter injected hypodermically.

In reply to a question from Dr. H. I. Bowditch, it appeared that no examination of the blood had been made. Dr. Bowditch doubted the propriety of calling this disease pyæmia unless there were evidence of pus in the blood.

Dr. Goss referred to a somewhat similar case reported by Dr. Cook before the Massachusetts Medical Society.

Dr. E. G. Cutler stated that in Dr. Cook's case the autopsy revealed no sign of ulcerative endocarditis, which evidence was particularly sought, and added that similar cases had been reported in Germany, one observer having met with six. These cases were included in a distinct class in a report on pyæmia made one year ago to the Pathological Society of London.

Dr. R. H. Fitz said that pyæmia suggested metastatic abscess, but there was nothing of that nature in this case. Thought that the case might primarily have been one of rheumatoid arthritis. The infection, perhaps, was introduced through the abscess near the toe. Cases of osteo-myelitis and periostitis have recently suggested that infective matter might be carried into the body without any apparent external injury. That the respiratory and intestinal tracts might serve as a means of absorption is a supposition which there is some reason to believe. Unnecessary to look for a common local origin of the abscesses in this case. The condition of the lungs indicates a probable embolic affection, but that the mammary abscesses had a like origin is not so probable. Positive evidence of a source of arterial embolism is lacking, and it seems improbable that emboli of venous origin large enough to create such disturbance could have passed through the capillary plexus of the lungs. The abscesses in the axillæ are to be attributed to the suppuration in the breasts, through the medium of the lymphatics, and did not require emboli as their cause. The case is rare in many particulars, and, if one of pyæmia, cannot be exclusively classified under any one of the usual subdivisions.

Dr. David W. Cheever had seen cases in children supposed to be pyæmia but not so proved by autopsy,—cases in which there was no open wound, but in which there had been fractures and bruises. Several were cited. In these instances patients died after some weeks with symptoms of pyæmia, but no cause of infection was discovered. He supposed it possible that some change might occur from injury to the veins following the blow, with subsequent formation of thrombi and their detachment.

PHILADELPHIA ACADEMY OF SURGERY.

STATED MEETING OF NOVEMBER 7, 1881.

DR. S. D. GROSS, President, in the Chair.

ANEURISM OF THE FEMORAL ARTERY CURED BY PRESSURE.

DR. S. W. GROSS exhibited a case, which he said was under the treatment of Dr. S. D. Gross, the President, with the following history.

About a year ago, a colored hod-carrier, aged 27 years, began to suffer from a constant dull, aching pain in the left knee, which he attributed to rheumatism, and which was increased by hard work. Four months prior to his admission into the Jefferson Medical College Hospital he noticed a beating just above the middle of the thigh, and he found at this point a rather soft pulsating swelling, about the size of a common marble. On admission, there was an aneurism of the superficial femoral artery, at the apex of Scarpa's space, as large as the fist, and the pain was still present in the knee. There was no history of syphilis, but he fell from a ladder and bruised the corresponding leg a few months previous to the appearance of the tumor.

On the 7th of October pressure was maintained for three hours upon the common femoral artery by means of a pestle, when it was discontinued on account of the severe pain which it produced. On the 9th of October the same measure was employed for five hours, but without any benefit. Four days subsequently two five-pound bags of small shot and a leaden weight of ten pounds were applied to the artery and the circulation completely controlled. The constant movements of the abdominal muscles in respiration and the restlessness of the patient rendered it necessary to hold the weights in place and at times to make slight pressure with the hand to overcome the pulsation. At the expiration of an hour and a half, with a view to relieve suffering, one-third of a grain of morphia was thrown under the skin, and the dose was repeated in two hours. At the end of another

thirty minutes, or of four hours from the beginning of the treatment, all pulsation had ceased in the tumor, which had become hard and firm; but the compression was maintained for five hours longer as a matter of precaution. After the contents of the sac had consolidated there was but little suffering, and the patient slept most of the time. At the present date the tumor is diminished one-fourth.

TRAUMATIC ANEURISM OF THE POSTERIOR TIBIAL ARTERY.

Dr. John H. Packard read the history of this case. Joseph D., æt. 11 years, a sturdy and well-conditioned boy, was admitted into the Episcopal Hospital October 8, 1881, with the following history.

Two weeks previous he had received a blow on the inner side of the left ankle from a bit of iron thrown by a playmate. The part "swelled a good deal," but the hurt was not thought much of until the day before his admission, when, in his mother's words, "the ankle burst and he lost a cupful of blood." Dr. Packard's attention was not called to the case until four days after the admission, when he found a small pulsating tumor just back of the inner malleolus. The next day he laid the tumor open and applied two silk ligatures, one above and the other below. Three days afterwards the bandage became suddenly saturated with blood, and the boy fainted. A compress was firmly applied, and Dr. Packard was summoned. Enlarging the wound somewhat, he found the upper ligature loose, apparently from the cutting through of some areolar tissue included along with the artery. A second ligature was applied, which held until the 18th,—somewhat over forty-eight hours,—when bleeding again occurred in the evening. He then exposed the artery a little higher up, and tied it again at a point about a quarter of an inch above the one previously chosen. After this there was no further trouble; the wound did well, and on the 23d —ten days after the first ligation and five days after the third—both ligatures were found lying loose. Healing progressed very rapidly, and the boy is ready for discharge.

HEMORRHAGE FROM A WOUND OF THE FACIAL ARTERY IN WHICH LIGATION WAS PERFORMED.

Dr. Packard related the following history.

B. F. Z., æt. 25 years, was brought to the Episcopal Hospital October 27, blanched and much prostrated by bleeding from a wound in the left cheek, about three-quarters of an inch from the angle of the mouth. Another wound about one and a half inches long, just over the edge of the lower jaw, seemed to be at right angles with the facial artery, and had been closed by means of a large pin and a figure-of-eight suture. The man stated that the wounds had been inflicted with a penknife, about ten days previous, and that two severe hemorrhages had occurred, one on the eighth day and the other on the evening before his admission. Ether was at once administered, the clots turned out of the upper wound, enlarged for the purpose, and a silk ligature applied to each end of the divided artery. The edges of the skin were then brought together by means of hare-lip sutures, and a wet dressing applied containing a small amount of carbolic acid. Healing took place rapidly, the ligatures coming away on the seventh day.

ARTERIAL HEMORRHAGE IN A CASE OF EXTENSIVE BURN; LIGATION OF THE BRACHIAL ARTERY.

Dr. Packard also related the case of Hilda A., æt. 18, admitted into the hospital during the service of his colleague, Dr. Hunter, September 7, 1881, having sustained, two weeks previously, severe burns from trying to hasten the kindling of a fire by means of coal-oil. Her body and both arms were terribly injured, and when he came on duty, October 1, the process of granulation was going on slowly, while from the irritability of the stomach there was reason to fear serious involvement of that organ or of the duodenum. This, however, was overcome after a few days, and her condition was greatly improved. On the 4th of November, at his daily visit, the resident surgeon, Dr. Robins, informed him that arterial hemorrhage had occurred from the left arm, and had been controlled by a compress over the brachial artery. On removing this compress (the patient being etherized) several jets of arterial blood spurted from vessels opening on the granulating surface at the inner part of the arm. He immediately, with his fingers, broke away the tissues at the inner side of the biceps, so as to expose the brachial artery at the usual point of ligation, when he applied a silk thread. No further bleeding occurred, and the case has progressed since as if no such alarming incident had threatened to interfere with recovery.

Dr. Wm. Hunt recollected a number of cases of spontaneous aneurism in negroes, and inquired whether the disease was more frequent in the black than in the white race. He had recently seen a case of traumatic aneurism of the facial artery, to which Dr. Levis had also been called in haste, which had formed in the course of one day. Dr. Levis and he arrived at the house at the same time. The whole mass was dissected out and the bleeding vessels tied.

Dr. J. M. Barton spoke of once seeing an aneurism which so resembled an abscess in the cervical region that it had nearly been laid open by the gentleman in attendance. He was deterred, however, by noticing the pulsation. The patient died from rupture of the sac, and the autopsy showed evidence of

syphilis. The aneurism was of the carotid artery.

FRACTURE OF THE PATELLA TREATED BY HOOKS.

Dr. T. G. Morton exhibited a patient who had been under treatment for fracture of right patella. There was used lead-water and laudanum for a week, when Dr. Morton's hinged modification of Malgaigne's hooks was applied. The ordinary hooks would not have obtained accurate apposition, since it was necessary to have the upper pair of hooks widely separated, while the lower ones were close together. No irritation followed. It is possible that bony union is favored by the fact that circulation is not interfered with when the hooks are applied, as when tight bandages are adjusted. The slight irritation due to the insertion of the points may increase the tendency to throwing out of callus for the bond of union. In this case hooks had remained in position fourteen days.

Dr. Packard said he was probably the first surgeon in Philadelphia to apply Malgaigne's hooks.* The patient, after having what was thought to be bony union, fell and refractured the bone. There is no danger, as has been supposed by some, of penetrating the joint. He himself now usually employs the method of Sanborn, which consists in loops of adhesive plaster that bring the fragments together by twisting.

Dr. Nancrede mentioned a case where there was no separation, though crepitus was present. He could just catch his finger-nail between the edges of fragments. Could such a fracture, without laceration of the tendon and fascia, be produced by muscular action?

Dr. Hunt had once treated a patient who had fracture of both bones without any separation. He needed no apparatus, and obtained a good cure.

Dr. Willard recently saw a case, undoubtedly due to muscular contraction, and no separation existed.

The President spoke of the recent successes in wiring old fractures where non-union had occurred, and also referred to the method of passing wire through the ligament of the patella and quadriceps tendon in order to bring parts together without interfering with the joint.

Dr. Morton called attention to two cases he had seen. In one the tendon was ruptured above the patella; in the other, below it. No wiring was done. One patient is known to have a good limb for walking, but ascending steps is somewhat difficult.

Dr. Willard had had a case where the ligament of the patella was torn close to the tibia, but he had hesitated about using wire.

Dr. Packard thought it would be difficult to get a good hold for wiring so close to the bone, and feared trouble might arise from inflammation of the bursa beneath the patellar ligament. He had seen recurring bursitis in this region following injury of the part. Sutures might be better employed in rupture of the quadriceps above the bone.

* See American Journal of the Medical Sciences, April, 1861.

SUPERNUMERARY THUMBS.

Dr. Nancrede exhibited two supernumerary thumbs removed from two children who had double thumbs on the left hand. The additional digits sprang from the head of the metacarpal bones and were well formed. There was no hereditary predisposition. A child born between these two presented no malformation.

Dr. Morton recently saw an Italian infant without ears. There were little nodules on each side of the head and an indistinctly-felt depression under the skin, as though a meatus might exist there.

URINARY CALCULI.

Dr. J. H. Brinton reported the case of a man whom he had sounded three or four times, about eighteen months ago, and failed to find stone, though the rational symptoms were present. Last spring, however, he found stone, and employed Bigelow's rapid lithotrity method, by which a large amount of fragmentary matter was removed. He sent the patient home because the weather was hot, but on his return this fall removed over fifty calculi by lateral lithotomy. He stated that he believed Dr. Agnew had once removed about two hundred calculi. The patient he had just referred to was able to fish small calculi out of his own bladder by inserting a soft rubber catheter and entangling the stone in its eye.

The President stated that he had removed as many as fifty-four calculi, and that Physick had extracted nearly one thousand at one operation.

CHEAP WATER-BED TO PREVENT BED-SORES.

Dr. Morton mentioned the use, at the Pennsylvania Hospital for the Insane, of water-beds made by stretching a piece of gum cloth over a shallow trough. Drs. Levis and Mears also spoke of the cheapness and advantages of this substitute for rubber mattresses filled with water, which they had seen used in other cities.

IMPROVED STYPTIC COLLOID.—Collodion, 100 parts; carbolic acid, 10 parts; tannin, 5 parts; benzoic acid (from the gum), 5 parts. Mix in the above order, and perfect solution is effected. This preparation is of a brown color, and leaves, on evaporation, a strongly adherent pellicle. It instantly coagulates blood, forming a consistent clot, and a wound rapidly cicatrizes under its protection.—*Louisville Medical News.*

REVIEWS AND BOOK NOTICES.

ECZEMA AND ITS MANAGEMENT. A PRACTICAL TREATISE BASED ON THE STUDY OF TWO THOUSAND FIVE HUNDRED CASES OF THE DISEASE. By L. DUNCAN BULKLEY, A.M., M.D., Attending Physician for Skin and Venereal Diseases at the New York Hospital, Out-Patient Department; Editor of the *Archives of Dermatology*, etc. New York, G. P. Putnam's Sons, 1881. 8vo, pp. 344.

A reviewer, himself an accomplished dermatologist, has recently suggested that dermatology as a specialty is likely to have a limited existence, seeing that the end of its present labors is but little more than to clear off the rubbish of ages and straighten the way to a knowledge of the facts of skin diseases, which, when once made plain, are quite within the reach of the "general practitioner."

This statement is probably true not alone of dermatology, but also of some of the other branches of practical medicine now cultivated as narrow specialties.

Dr. Bulkley's book is a vigorous labor towards this desirable end. Its aim is, in the words of the preface, "to present the general practitioner with as clear a guide as possible to the recognition and management of eczema." As more than one-third of all persons affected with skin diseases have eczema, this disease may well be called the keystone of dermatology, and the monograph before us, if its author succeed in his aim, will prove an invaluable contribution from special to general medical knowledge. And success is not only assured; it is achieved. The book is a clear guide. It is practical, simple, direct in style, logical in arrangement, and exhaustive in the treatment of the subject. It cannot fail to extend the reputation of its distinguished author. Thoughtful practitioners of a generation no longer young placed Erasmus Wilson among the authors to be reached from the office-chair: we of to-day are more fortunate in the possession of such works as those of Neumann and Duhring, and many a youngster, who to-day deems the recognition and management of eczema no very difficult matter, basing his conclusion upon what is to be seen in hospital amphitheatres, will turn, in days to come, with satisfaction to Bulkley in time of need. J. C. W.

PRACTICAL AND ANALYTICAL CHEMISTRY. By FRANK CLOWES, D.Sc., Senior Science Master at the High School, Newcastle-under-Lyme, etc. From the Third English Edition. Philadelphia, H. C. Lea's Sons & Co., 1881.

The author originally prepared the above work for the use of his own classes in analytical chemistry. It was designed to acquaint the student first with the more common properties of some of the ordinary gases, then the simpler tests for the various bases and acids, and finally with the methods commonly employed in qualitative analysis. With this object in view, the work has been divided into seven sections; and in this edition, as in those preceding it, we discover that the information so important to the beginner in analytical chemistry is scattered. Explanatory matter which should unquestionably accompany lists given upon the first pages is found near the close, and then, too, in small type. Actual use of the work for several years with large classes of students has proven this to be an objectionable feature. Another point which we had hoped to find improved was that bearing upon the separation of the members of the various groups from each other. The author has contented himself with giving instructions for the detection of the bases, but in very few instances has he described methods which would serve not only qualitative but also quantitative purposes. An example of this is the separation of magnesium from the alkalies. The method given for this is very unsatisfactory. Upon this very point of separations we think great improvements might be made in the book.

In discussing the decomposition of silicates the author recommends for those containing alkalies the use of hydrofluoric acid or the fusion with barium hydrate, utterly ignoring the simple method of Dr. J. Lawrence Smith,—a method which is used in all American laboratories, and one which is of easy execution and yields perfectly satisfactory results.

The formulæ AmCl, AmHo, etc., instead of NH_4Cl, NH_4OH, etc., appear, and with beginners who have been taught the latter mode of representation the former tends to create confusion. Section 7 contains excellent directions for the preparation of the apparatus, reagents, etc., used in qualitative analysis.

The reactions for the rarer elements are found under Appendix I., and have been chosen with care.

The use of the spectroscope for analysis is briefly but at the same time very satisfactorily described under Appendix I., while under Appendix II. information regarding thermometric scales, weights and measures, etc., receives consideration. E. F. S.

LECTURES ON THE PATHOLOGICAL DISEASES OF THE NERVOUS SYSTEM: DISEASES OF THE SPINAL CORD. By J. M. CHARCOT. Translated from the Reports of Dr. E. BRISSAUD in *Le Progrès Médical*, by CORNELIUS G. COMEGYS, M.D.

Moved, we suppose, by a feeling of respect for his old teacher rather than by any desire of pecuniary or other gain to himself, Dr. Comegys has translated the excellent, abstruse lectures of Dr. Charcot, which appeared not long since in the columns of *Le Progrès*

Medical. The character of Prof. Charcot's work is too well known to require notice. Always brilliant and scientific, rarely of immediate practical value, always fragmentary and incomplete, it undoubtedly comes from the hand of a master, and is of service rather to the deep student of nervous diseases than to the practitioner of medicine, who must take a wide view of the whole field and not linger too long upon the scientific aspects of one portion of it.

The work of the translator is well done; but we have two faults to find: one, he sometimes cleaves too closely to the French idiom, —a trivial fault; the other, more serious, the occasional use of abominable words, either of his own invention or of that of some one equally guilty: the law makes thief and receiver—*i.e.*, inventor and user—equally criminal. For example, "lesed" instead of "diseased,"—a useless, barbarous defilement of English, to be reprobated most strongly.

GLEANINGS FROM EXCHANGES.

STRAUS ON TABETIC ECCHYMOSES.—Straus (*Archives de Neurologie*, No. 4, 1881) describes another form of cutaneous eruption succeeding the lightning pains of ataxy, in addition to the papular, pustular, herpetic, etc., eruptions described by Charcot and Vulpian. These consist in veritable ecchymoses, which appear in a certain number of ataxics after the cessation of a violent accession of pains, sometimes not showing themselves for several hours. The appearance and course which they pursue correspond entirely with the extravasations resulting from injury, and were at first supposed by the author to be really due to mechanical injury, but this he found on careful and repeated examination not to be the case. The spontaneous nature of the ecchymoses was clearly proved. The patches are irregular in shape and size, and also variable in number. The intensity of the discoloration is generally proportional to the duration and violence of the pain. They almost always occupy the member, or part of it, which has been the chief seat of pain, and may be unilateral or bilateral accordingly. Generally the ecchymoses occur at a higher level than the actual seat of pain,—in the leg, if the ankle has been specially attacked, and in the upper arm, if the elbow has been the seat of the pain.

The distribution of the patches does not correspond with the course of the cutaneous nerves, like the tabetic eruptions described by Charcot. Sometimes, but exceptionally, the ecchymoses are confined to one limb, and it may happen that they appear not in the limb which has been the seat of pain, but in the opposite. No particular period in the course of the disease can be fixed at which they occur. Nor can they be said to be very common.

As to their mode of causation, mechanical injury being excluded, two hypotheses may be entertained. According to the one most in harmony with established data, the ecchymoses may be looked upon as the result of local vascular dilatation, either active vaso-dilatation or passive vaso-paralysis, caused reflexly by irritation of the posterior radicular zones acting on the anterior roots. The other hypothesis is, that the ecchymoses are due to direct irritation of vaso-dilator fibres contained in the posterior roots. Most physiologists hold that the vaso-motor nerves pass out by the anterior roots; but the experiments of Brown-Séquard seem to indicate that the posterior roots also contain vaso-motor fibres. More recently, Stricker has published experiments which he holds demonstrate the existence of vaso-dilator fibres in the posterior roots of the sciatic in the dog. This view has been contested by Cossy and Vulpian, but again affirmed by Stricker. If Stricker's view is correct, then the ecchymoses would find an explanation in the direct irritation of vaso-dilator nerves of the posterior roots by the active process on which the lightning pains depend.—*Brain*, October, 1881.

THE USE OF FUMIGATIONS OF TINCTURE OF IODINE.—"The powerful resolutive action of iodine," says M. Guéneau de Mussy, "indicates its use in a large number of congestive and inflammatory affections of a subacute or chronic form" (*Le Praticien*). There are cases, however, where its direct application to the diseased organ meets with some difficulties: in affections of the tympanic cavity, for example, the membrane tolerates badly applications of tincture of iodine. The author recommends the following proceeding, which, without inflaming the tissues, brings them in contact with the remedy: a small ball of iodized cotton is enveloped in cotton-wool and introduced into the ear; the iodine is exhaled in the meatus and forms an iodized atmosphere over the membrane: at the end of twenty-four or thirty-six hours the cotton is decolorized, and should be removed.

M. de Mussy has applied the same proceeding with marked advantage in a case of chronic engorgement of the uterus. Besides general treatment and the use of belladonna suppositories, he prescribed tepid injections every evening of infusion of chamomile and borax; immediately after these injections he introduced into the vagina a tampon of iodized cotton covered with cotton-wool. Besides this direct resolutive action, the author attributes to iodine emmenagogue properties, and warns against the use of applications of iodized cotton in women subject to metrorrhagia.—*Medical Press and Circular.*

CEREUS BONPLANDII.—Dr. Cullen states that this is one of the many species of cactus, and that having tried it in several cases of

functional heart disease he is willing to wait and try again before deciding it is the best remedy ever used, as asserted by several physicians. One of his cases has been at death's door several times, and has recovered under its use. The symptoms were shortness of breath, inability to lie down, great frequency of pulse, faintness, flushing of face, lips and fingers almost stagnant with blood. Having tried the usual remedies,—digitalis, bromide of potassium,—and these without success, he gave the fluid extract of cereus bonplandii, in fifteen-drop doses. In half an hour he repeated the dose. The action of the heart moderated, and from 125 gradually came down to 90 pulsations in the minute, or even less. In two cases there was suppression of urine, which warm baths and acetate of potash failed to relieve; and in conjunction *hair cap moss* was given,—half a drachm of the fluid extract at a dose every two hours. In one case the kidneys commenced acting, and over a gallon of water passed during the next twenty-four hours. He does not believe the patient would have lived twenty-four hours without the use of the latter remedy. The author believes that this combination is the best where the urine is scanty and albuminous, and drowsiness, indicating coma, is apparent. The few cases of benefit already have led him to believe that both drugs will be more freely used in similar cases.—*The Virginia Medical Monthly.*

SPONGE-GRAFTING—Dr. D. J. Hamilton (*Edinburgh Medical Journal*, November, 1881) asserts that the vessels of a granulating surface are not newly formed, but are simply the superficial capillaries of the part which have become displaced. They have been thrown upwards as granulation loops by the propelling action of the heart, because the restraining action of the skin has been removed.

While studying the subject, Dr. Hamilton was much struck by the similarity of the process of vascularization as seen on a granulating surface and that which occurs when a blood-clot or a fibrinous exudation is replaced by a vascular exudation tissue. Blood-clot or fibrinous lymph plays merely a mechanical and passive part in any situation where it becomes replaced by a fibrous cicatrix, and its vascularization is not owing to new formation of blood-vessels, but rather to a displacement and pushing inward of the blood-vessels of surrounding tissues. Dr. Hamilton being convinced that the blood-clot or fibrinous lymph, before organization takes place, was just as so much dead matter in a tissue, it occurred to him that if we could employ, instead of blood-clot or fibrinous lymph, some dead porous animal tissue, it also would, in the course of time, become vascularized and replaced by cicatricial tissue.

In order to test the correctness of this view, he has employed sponge in several instances as a dressing to granulating wounds, and has found that it is gradually dissolved, the reparative material growing up within the interstices of the sponge, its interstices becoming filled with blood-vessels and cicatricial tissue, just as in the case of a blood-clot, and ultimately the whole of the sponge disappears in the wound, leaving an organizing mass of new tissue in its place. The vacuities in the sponge appear to be especially adapted for allowing of this, the framework of keratode affording support to the young vessels which are formed within it.

Dr. Hamilton's paper, which is accompanied by a fully illustrated account of the microscopic histology of the process, is too long to be readily abstracted, but is very suggestive and will repay careful perusal. One practical point may be added. He says that wherever sponge-grafting is applied it must always be remembered that the sponge must be employed simply for *filling a vacuity;* otherwise it will cause great inflammation, and the efforts at organization will not proceed.

TREATMENT OF GOITRE BY IODOFORM.—M. Boechat (*Correspondenz-Blatt für Schweitzer Aerzte*) has employed iodoform in the treatment of goitre. 1. By external application the author has employed a glycerole covered with a layer of collodion: the results were *nil* in old cystic or parenchymatous goitres. In recent goitres, on the other hand, of soft consistence. the tumor diminished more rapidly than with iodine or iodide of potassium. The odor is a serious inconvenience. 2. Internally Boechat prescribes iodoform in pills of one centigramme, not more than ten a day. This treatment has only been applied in the case of two patients with old-standing goitres. 3. M. Boechat has employed interstitial injection in three cases. The first patient, who had a goitre from infancy, received for fifteen days the injection of half of a Pravaz syringe of a saturated solution of iodoform in ether. Cessation was necessary on account of very intense inflammatory reaction, but the goitre was markedly diminished. In the second case two injections were sufficient to cause amelioration in an old-standing goitre. In the third case, a very old goitre, suppuration took place with no improvement. To sum up, M. Boechat believes that this is a useful method, which might become more general. —*Medical Press and Circular.*

CASE OF COMPLETE DISAPPEARANCE OF A LARGE UTERINE MYOMA WITHIN SIX MONTHS OF THE REMOVAL OF THE UTERINE APPENDAGES.—Mr. Lawson Tait writes to the *Lancet* of October 15, giving the case of an unmarried lady, 35 years of age, suffering from a rapidly growing uterine myoma of considerable size and of about three months' duration. On attempting to operate, the tumor was found fixed in the pelvis, so that it could not be removed successfully. The uterine appendages were then taken away, the Fallo-

pian tubes being removed close to the uterine cornua. The tumor was estimated at about five pounds' weight. The patient rapidly recovered, retention of urine, which was a prominent and distressing symptom, disappearing after the operation. Seen by Mr. Tait six months later, there was not a vestige of the tumor to be discovered. It had entirely disappeared.

MISCELLANY.

THE WORK OF THE SPECIALIST.—In a recent address by Dr. J. Russell Reynolds on specialism in medicine, speaking of the multifarious duties and necessary general qualifications of the country practitioner, he says, "But if the country practitioner be thus well informed and able to do his work, and to do it well, let me ask in what way was he fitted for this work? And to this I answer without hesitation, by the work of specialists, who have taught him in the wards of hospitals and in systematic lectures, and by their writings, what their special work has enabled them to teach, and which they could not by any but the rarest gifts, or still rarer accidents, have obtained in any other way. Other men have sown, and they have reaped or entered into their labors."

A TOM-CAT STYPTIC is the term applied by some journalists to the following treatment. A woman on a Southern plantation was bleeding to death from the nose. The doctor had no ordinary expedient, but, seeing a cat in the house, he had its head chopped off. Then he secured a section of the intestine, cleaned it, tied one end and thrust it through the nostril, and lastly distended the gut by injecting water, and tied it near the nose. The bleeding was immediately stopped.—*Pacific Medical and Surgical Journal.*

BEER-DRINKING NOT "TEMPERANCE."—Prof. Binz says that in one German capital the annual consumption of beer is four hundred quarts per head, equal to rather more than a quart of beer a day. As this means fifty-two centigrammes of alcohol, it would be equal to something like five ounces of whisky in twenty-four hours.

SIR JAMES PAGET was a candidate for the Lord-Rectorship of Glasgow University a month ago, but was unsuccessful, the majority of votes (of the students, who, we believe, elect) being given to Alexander Bain, the metaphysician. The position is an honorary one, being held for one year only. The chief duty is the delivery of an annual address.

THE celebrated chemist, Prof. Bunsen, of Heidelberg, celebrated the fiftieth anniversary of his doctorate on October 17 last. On the occasion, the title of "Efficient Privy Councillor," with the prefix of Excellency, was conferred on him by the Grand Duke of Baden.

DR. LOUIS ELSBERG has resigned his professorship in the University of New York, and has been elected to the chair of Laryngology and Diseases of the Throat in Dartmouth College. Prof. Vulpian has resigned his position as Dean of the Faculty of Medicine (Paris), and Prof. Béclard selected as his successor.

NOTES AND QUERIES.

ERRATUM.

IN the formula for migraine, p. 145 of our last issue, read morphine, gr. i, instead of gr. viii.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM NOVEMBER 27 TO DECEMBER 10, 1881.

MURRAY, ROBERT, COLONEL AND SURGEON, MEDICAL DIRECTOR, MILITARY DIVISION OF THE MISSOURI.—The leave of absence granted him in S. O. 100, October 5, 1881, Military Division of the Missouri, extended two months. S. O. 272, A. G. O., December 2, 1881.

SUMMERS, JOHN E., LIEUTENANT-COLONEL AND SURGEON, MEDICAL DIRECTOR OF THE DEPARTMENT.—Granted leave of absence for twenty-five days. S. O. 123, Department of the Platte, December 1, 1881.

WRIGHT, J. P., MAJOR AND SURGEON.—The leave of absence granted him in S. O. 229, November 8, 1881, Department of the Missouri, extended twenty days on surgeon's certificate of disability. S. O. 123, Military Division of the Missouri, December 2, 1881.

LAUDERDALE, J. V., CAPTAIN AND ASSISTANT-SURGEON, McPherson Barracks, Ga., before complying with Paragraph 3, S. O. 124, c. s., Department of the South, granted leave of absence for one month, with permission to leave the Department. S. O. 136, Department of the South, December 8, 1881.

HALL, WM. R., CAPTAIN AND ASSISTANT-SURGEON.—The leave of absence granted him in S. O. 224, Department of the Missouri, November 2, 1881, is extended fifteen days. S. O. 120, Military Division of the Missouri, November 25, 1881.

CORBUSIER, WM. H., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for four months. S. O. 266, A. G. O., November 25, 1881.

PERLEY, H. O. CAPTAIN AND ASSISTANT-SURGEON.—At the expiration of his present leave of absence, to report in person to the Commanding General, Department of the East, for assignment to duty. S. O. 274, A. G. O., December 5, 1881.

DAVIS, WM. B., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Granted leave of absence for four months. S. O. 269, A. G. O., November 29, 1881.

STRONG, N., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Fort Douglas, U.T., and assigned to duty as Post-Surgeon at Fort Cameron, Utah. S. O. 121, Department of the Platte, November 26, 1881.

TAYLOR, A. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Fort Supply, Ind. Ty. S. O. 246, Department of the Missouri, November 20, 1881.

CARTER, E. C., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Angel Island, Cal. S. O. 203, Military Division of the Pacific and Department of California, November 22, 1881.

RAYMOND, HENRY J., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Alcatraz Island, Cal. S. O. 203, Military Division of the Pacific and Department of California, November 22, 1881.

JOHNSON, RICHARD W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON (recently appointed).—To report by letter to the Commanding General, Department of Dakota, for assignment to duty. S. O. 272, c. s., A. G. O.